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South Carolina Physicians In Service (By Counties)

(As of July 24, 1942)

(See Page 219)

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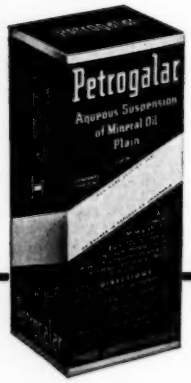

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The Diagnostic Significance of Various Types of Pain in Back Derangements

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FLORENCE, S. C.

A surprisingly large percentage of any physician's patients consult him because of discomfort which is due to some derangement of the vertebral column. Their complaints are diverse, but usually justified by demonstrable pathological changes. Functional disorders are common in the cardio-respiratory system, in the gastro-intestinal tract, in the nervous system, but they are exceedingly rare in connection with the skeletal system. Since pain is the common denominator in all back disorders, it becomes of paramount interest to recognize some of the diagnostic peculiarities of this symptom. The pain arising from derangements of the back has characteristics almost as definite as the pain of angina pectoris, pleurisy, peptic ulcer and biliary colic, with all of which it is not infrequently confused. It is this very confusion which makes the problem of back pain not only one for the orthopedist but a problem for the surgeon, the family physician and the internist. If any justification is needed for my venturing into an essentially orthopedic field, that is it. Inquiry into the circumstances surrounding the initial appearance of pain, determination of the factors which aggravate or relieve pain, the exact localization of pain—these and a few other considerations which can be brought out quickly in a well taken history form the basis for fairly conclusive deductions regarding the nature of the skeletal abnormality.

Roughly speaking *senescent change* in the vertebral column or *trauma* or a combination of the two is responsible for the great majority of painful backs. The pain in these conditions result chiefly from irritation of sensory nerve roots either within the neural canal as in protrusions of intervertebral disks or at the point of emergence of the nerve through the intervertebral foramina which is true of hypertrophic arthritic and osteoporotic disease of the spine. There are, however, many sensory nerve endings in the intervertebral disks themselves and in the posterior longitudinal ligament so that disease or injury of these structures does induce pain at the site of trouble in addition to that which may be caused by impingement on sensory nerve roots.

Under the heading of senescent change I refer to two entirely different processes. In one, the so-called hypertrophic spondylitis, the prominent feature is excessive bone formation probably resulting almost exclusively from mechanical factors—lessened elasticity of intervertebral disks with proportionate loss of their shock absorbing function, greater wear and tear on the articular surfaces of the bodies of the vertebrae and consequent heaping up of irregular spurs. The end result is encroachment on the structures in the intervertebral foramina. The second senescent process is characterized by serious decalcification of the vertebral bodies—senile osteoporosis — which proceeds to such a point that comparatively slight trauma produces collapse of one or more vertebrae thereby compressing the soft structures adjacent to the site of injury. The hyper-

(Read at Annual Session, S. C. M. A., May 20, 1942.)

trophic bony changes should be suspected in middle aged, stocky, florid individuals while osteoporotic changes more often occur in thin, elderly women.

The trauma which is responsible for so many back complaints is often quite trivial, usually indirect, and frequently lost sight of in the suffering which ensues. One of my patients suffered a compression fracture of a thoracic vertebra by simply lifting a lid from the top of the stove; another had a ruptured intervertebral disk as the result of climbing awkwardly out of the bathtub. While a direct trauma from a fall is not infrequently responsible, such incidents are readily remembered and offered spontaneously in history taking. The lesser accidents must be sought for diligently and never discounted because of their minor character. When trauma results in rupture of an intervertebral disk with extrusion of cartilaginous substance back into the neural canal, the sensory roots of the spinal nerves in that vicinity, usually L 4 and L 5, are drawn taut by impingement on the projecting mass.

The mode of onset of the pain provides a very important clue to the underlying trouble. If the first pains are rather vague, unimpressive and not particularly disabling but over the course of weeks or months build up to the point of causing real annoyance, the best bet is hypertrophic spondylitis. On the other hand, if the patient can point to one particular moment on one particular day when the pain started, it is a foregone conclusion that trauma in some form—tearing of the annular ligament of an intervertebral disk, rupture and protrusion of a disk, or collapse of an osteoporotic vertebra—is responsible for the complaints. It takes no medical omniscience to reach such a conclusion but as a matter of fact, that point is too often overlooked. Long, expensive and futile searches for foci of infection are frequently undertaken when ordinary common sense would dictate that no possible combination of virulent micro-organisms could invade the joints of the vertebral column in such cataclysmic fashion.

Furthermore considerable light can be shed on the nature of the back derangement by knowing what the patient was doing when the pain first appeared. A twisting strain or a violent lifting effort in a bent forward position is most likely to result in disk protrusion while comparatively slight blows on the back, the jar of a bump of an automobile, in fact the most trivial injury imaginable will often serve to break down a fragile osteoporotic vertebra in elderly women. It is important also to learn if the patient has had a good deal of back trouble for some time prior to his current bout of pain. Recurrent attacks of "lumbago" usually signify one of two conditions—either long standing hypertrophic changes of the articular surfaces of the vertebrae or the torn annular ligament of a disk whose weakened fibers might have difficulty in retaining the nuclear material in the event of another bit of violence.

The *conditions which aggravate and relieve* the pain afford valuable evidence for a judgement regarding the pathological condition in the spine. Persons suffering from hypertrophic changes in the cervical spine will almost invariably complain that the *assumption of a fixed position* for any length of time will aggravate the pain which they have either in the occipital area, in the neck itself or over the shoulder and down the arm. They find that watching the moving picture screen, driving an automobile and particularly resting the head on a pillow at night will induce acute discomfort. Characteristically they wake up every few hours during the night to get relief by flexing and extending the neck and massaging it vigorously. Relief of back pain which comes with the *recumbent position* in bed is most pronounced in individuals suffering from collapse of a vertebra while the very same position is quite apt to accentuate the pain due to a protruded intervertebral disk. Various *movements of the spine* as induced by every day procedures serve to localize the site of trouble rather than differentiate between types of trouble; for instance use of the shoulder girdle in manual labor or the effort of rolling over in bed commonly intensifies the chest discomfort associated with spondylitis in the thoracic region. Flexion of the spine will cause exacerbation of pain in practically any back disorder which involves the lumbar portion. The sciatic pain associated with protruding intervertebral disk is made worse by standing and walking because

of the additional stretch involved in extending the leg. Sitting will also increase the discomfort in this condition because of the pressure on the sensitive nerve trunk.

Probably the most significant differential point in this connection is the *effect of unguarded movements* such as coughing and sneezing. Where these acts produce sudden intensification of back and leg pain, the evidence is overwhelmingly in favor of a ruptured intervertebral disk. The mechanism of this pathognomonic symptom has been quite beautifully worked out recently by Eaton[1], although long regarded by such men as Spurling and Grantham[2], Dandy[3], Love and Walsh[4] as of the utmost value in arriving at such a diagnosis. Eaton[1] has shown that such acts as coughing, sneezing, heavy lifting and straining, as in defecation, result in immediate engorgement of veins in the epidural space displacing the dura toward the spinal cord and exerting traction on the firmly fixed nerve roots. Such traction on normal nerve roots is insufficient to produce pain but will do so if the root is diseased or injured. This same investigator has advanced a very plausible explanation for the commonly observed phenomenon of intensification of root pain *during sleep*, a symptom which he attributes to slight lengthening of the vertebral column as the body weight is removed and the intervertebral disks expand. Such lengthening, although slight, probably exerts considerable pull on the firmly fixed nerve roots. For this reason many patients with nerve root injury prefer to sit up all night.

The *location of the pain* may be quite misleading, especially when the cervical and lower lumbar portions of the spine are involved. A point commonly overlooked is that pain manifests itself in the cutaneous areas supplied by the affected nerve root. These areas are often at considerable distance from the site of the nerve irritation and, which is still more confusing, frequently are identical in location with those areas commonly associated with disease of the abdominal or thoracic viscera. To cite a few instances: pain projected by irritation of the upper two or three cervical nerves produces a vicious occipital headache closely simulating that of severe hypertension; involvement of the lower cervical roots produces pain over the shoulder and down the arm to the hand similar to that of subdeltoid bursitis or arthritis of the shoulder joint; upper dorsal nerve root injury is very apt to project pain anteriorly to the precordium where it must be differentiated from that of angina pectoris; the lower dorsal roots have their cutaneous distribution over the upper abdomen, where, irritated at their vertebral attachments, they can reproduce quite beautifully the pain of cholecystitis or peritoneal adhesions. The list would be incomplete if mention were not made of the most classical example of all—the well known syndrome of sciatic neuritis resulting from involvement of the lower lumbar nerve roots, very often as the result of a ruptured and herniated intervertebral disk.

Frequently but by no means invariably, referred pain as in the instances just cited occurs in association with some unmistakeable evidence such as "stiff neck" or "lumbago" which directs the attention of both patient and physician to the vertebral column. At other times it is well to hold in mind that the cause for obscure pain inadequately explained by clear-cut visceral disease may lie in derangements of the vertebral column.

The *elicitation of pain by physical examination* provides a number of important clues to the underlying trouble. Without attempting to catalogue the whole list of special tests performed by orthopedists, let me mention a few simple ones which have helped me in deciding whether to continue treating the patient myself or refer him to someone who knew something about backs. *Knuckle percussion over the spinous processes* will usually localize the trouble quite readily but the painful levels should be marked and rechecked by subsequent going over. A consistent sharply localized painful area is quite significant. The point of insertion of the cervical muscles into the base of the skull is a spot where exquisite tenderness can be found in cases of upper cervical arthritis while the whole body of the trapezius muscle is painful in many cases of lower cervical arthritis. A complaint of severe pain over the shoulder and down the arm, worse at night, associated with free abduction at the shoulder

is practically pathognomonic of lower cervical arthritis. Thorough *palpation of the thoracic wall* often reveals areas of superficial tenderness which the patient has confused with the manifestations of heart disease. Unfortunately *palpation of the abdominal wall* has been performed so long by surgeons with a downward thrust looking for inflammatory disease among abdominal organs that for the most part we have lost sight of the fact that the abdominal wall is a respectable structure in its own right and not merely a barrier to exact diagnosis of abdominal disease. Lifting up on the abdominal wall and pulling it way from underlying organs will reveal repeatedly that the tenderness lies in and not beneath this structure. If that is the case, one should suspect that the sensory nerve root at the appropriate level is being irritated. *Examination of the sciatic nerve* is an important procedure because it gives definite information concerning the integrity of the lower lumbar and upper sacral nerve roots. This is usually done in two ways —by direct palpation over the course of the nerve down the back of the thigh and calf, and by stretching the nerve with the straight leg raising test, the Kernig procedure or dorsiflexing the foot. When these manipulations elicit pain, and when similar pain is induced by sneezing and coughing, the diagnosis of protruded intervertebral disk must be considered. Sometimes it is difficult to tell whether a given pain down the sciatic nerve is due to sacro-iliac arthritis or to an intraspinal lesion such as a protruded disk. In such cases it is helpful to bend the neck forward so that the chin comes to rest nearly on the sternum while the lower part of the back is immobilized by support in a chair. If this intensifies the pain, one should suspect that the origin of the pain is intraspinal.

Quite naturally these observations will require X-ray confirmation but the time spent in rather detailed history taking is well invested for several reasons. In the first place it is quite apt to render unnecessary a number of expensive diagnostic procedures such as gastro-intestinal X-rays, cholecystography, etc.; in the second place it enables one to localize quite accurately the level of the vertebral column which should be X-rayed, a point which most roentgenologists appreciate because of the varying techniques employed in visualizing the different portions of the spine; and finally there is at least one very common derangement of the back, the protruded intervertebral disk, where X-ray examination is of questionable value[3] and almost complete dependence must be placed on an accurate history and a few simple procedures to elicit the characteristic pain. This is not an argument for diagnostic short-cuts. For the great majority of patients, mine especially, expense is a major item of consideration in outlining any diagnostic procedures. There is still something to be said for that type of investigation where various diagnostic procedures are skillfully selected for performance as distinguished from that type of diagnostic mill where vast quantities of information, much of it unessential and unnecessary, is amassed, and only then sifted.

Summary

1. The various common derangements of the vertebral column are responsible for painful sensations simulating many more serious systemic diseases.

2. A careful consideration of these pains from the standpoint of (a) mode of onset, (b) conditions aggravating and relieving them, (c) localization of painful areas, and (d) their elicitation by physical examination provides evidence of a fairly conclusive nature regarding the nature of the underlying pathological process in the spine.

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Discussion

DR. J. W. WHITE, GREENVILLE:

Mr. President, members and guests, I appreciate

this opportunity to discuss Dr. Mead's well prepared paper on a difficult topic and shall try to say a few words that will tend to supplement it and avoid possible confusion in a most complex sort of subject. I am in essential agreement with Dr. Mead and commend him on the common sense way he has covered the ground. There are a few points that I would like to add and a few points to emphasize. It is a development of Dr. Chamberlains paper last year on cervical arthritis, and I feel that it is well for us to discuss these important matters that are so common in our practice and often so confusing.

First of all I would like to suggest that a more intimate knowledge of the anatomy of the spine particularly the lumbosacral region, where most of the trouble exists, be acquired by actual study of a dry articulated spine. I just could not get along without one in my office and very excellent half sized ones are inexpensively produced made of some durable plastic material. It helps to make a difficult uninteresting subject more appealing, and in that way is of great help both to ourselves and in explaining the situation to our patients.

To get down to the fundamentals, it behooves us for our patients sake to know what good and bad posture is and to realize that in our artificial, relatively physically inactive type of modern existence, poor posture at least in the type of patient we see in our office is the rule rather than the exception and that poor posture unquestionably predisposes us toward these severer forms of backache. So many of us consider poor posture in terms of round shoulders rather than the excessive lumbar lordosis that I feel we are justified in calling attention to the constant strain on our vulnerable lumbosacral region by the extreme hyperextension caused by the lordosis.

When one appreciates that at least half of our body weight is supported by the lumbosacral disc barely two inches in diameter, even normally somewhat obliquely placed, its vulnerability is seen. It is a wonder to me that we do not have more trouble in this region. When our low back is hyperextended as it is in most non-arthritic low back sufferers, another considerable reason for trouble is seen when one examines the articulated spine. The articular facets are most important in stabilizing and limiting spinal movements, and it is seen that in hyperextension their overlap is increased so that they might "hit bottom" so to speak, particularly if there is a thinning of the intervertebral disc. Even without actual pathology, there must be considerable natural variation peculiar in this structure as evidenced by the fact that we are always a fraction of an inch shorter at night than in the morning. When these articular facets do "hit bottom," I feel that pain must be experienced associated frequently with sufficient swelling to cause pressure on the nearby nerve roots which Dandy feels is so pathognomonic of disc lesions.

I feel that we are still in the experimental stage in disc lesions and that the last word on the subject is far from being said. Much is to be learned about the behavior of the disc itself and its variation in health and disease. I admit that surgical interference seems justified not infrequently at the present time, but I am not willing to admit that an individual with a true disc lesion cannot get well without operation. Think of the multitude of people with back pain many of whom must have had prolapses who have recovered. Nature has a way of eliminating misplaced bone fragments in fracture cases. I am sure she is capable of taking care of the much softer material extruded from the nucleus pulposus. It is also well to remember that even after removal of extruded disc material, there is no assurance that under continued body weight on an already damaged structure more of the same material will not be forced out. Laminae, between which the disc trouble is, should always be fused as a part of the same exploratory operation as this will eliminate the affect of further weight on the damaged disc, and permit of the natural accommodation of emerging nerve roots to the altered foramen which nature has made generously large.

Just a word about the ligamentum flavum which, when at operation a disc lesion cannot be identified, is often found to be hypertrophied and pressing on nerve roots. In my estimation here is an instance where conservative treatment directed toward posture would have been well worth trying, as the very elongation of this ligament which occurs when the lordosis is corrected makes it thinner and less likely to produce pressure.

I admit that the fact that in my office practice, I see as many functional backs as organic ones, unquestionably contributes toward my conservative attitude toward the entire question. I guess people with pain in the back come earlier to an orthopedist than an internist before it "gets them down" too far. By instruction in posture, rest and a simple brace such as a "Camp" support, I find in the functional cases real relief can be expected. My secretary tells me that one out of every four new cases coming to my office comes primarily because of backache, and my impression is that only one-half of these have organic evidence of pathology either by physical examination or X-ray.

Dr. Mead's discussion of referred back pain in arthritics simulating various diseases is most important and should forever be borne in mind—a point which Dr. Chamberlain brought out so well last year in his paper. We must remember that we can have absolutely negative X-rays in patients totally disabled with spinal arthritis and conversely, tremendous hypertrophic changes in a spine do not necessarily carry with them a hopeless prognosis. Think of the hypertrophic arthritic changes seen

sometimes incidentally in patients suffering from an entirely different disorder. As an insurance carrier, however, I admit I would not recommend taking on such a patient as an employee.

I hope that this rambling discussion may give some of you a little encouragement in a complicated frequently discouraging problem. My natural optimism may be distorting my opinion unjustifiably, but since becoming, through the years of office practice, well acquainted with backs, I am glad to keep on seeing and treating them.

Incidentally, it is interesting to note that the word sacro-iliac in relation to back pain seems to have survived only in some of the corset catalogues. Some of us will remember the furor about sacro-iliac disease and strain twenty-five or thirty years ago.

Whether organic or inorganic, my final plea prosaic as it is, is that real consideration be given to posture in every back problem and to call attention to its fundamental importance in the production of back pathology. It plays frequently, a significant role in the incidence of arthritis in the spine before it involves other less misused joints in the body.

Dr. Mead has given us a great deal to think about.

The Question Box

Presented by Dr. N. B. Heyward
Annual Session, S. C. Med. Assoc.
Columbia, May 20, 1942

Dr. Heyward: Someone on the committee, it wasn't I, decided that they had heard of or had seen this Question Box. I don't know why they elected me but they said I would have to put it on. We thought that perhaps some of you back home have got some problem that is worrying you and you never did quite figure it out and you wanted to ask somebody and talk to them about it. Here is your chance. Perhaps it would be better if you would write out your questions. As a matter of fact several have been handed to me already and if you have one in mind or as things go along you think of one, you write it to me or I will give the "Mike" and you can ask your own question. You can write it out and I will ask the question.

Now, as your answer to these questions, —we have gone over the profession and we have picked out some fellows we think are pretty good. We think they can answer anything you want to know. We are putting them up for that. You can ask the questions, I am sure they will do the best they can to answer them. We will line them up. Will the gentlemen come up as we call them. On this Question Box we have asked to fill in for the surgical questions Dr. F. E. Kredel, Charleston. For any medical question our own Dr. O. B. Mayer, he is at the Fort, he has been divorced from us but we still claim him. For any genito-urinary questions we have asked Dr. O. T. Finklea of Florence, S. C., he is the one to shoot the genito-urinary questions at. In pathology, who else but Dr. Lynch, from Charleston. In the field of clinical pathology and hematology, Dr. J. M. Fedder from Anderson, S. C. Sit up there, Dr. Fedder, so they can look at you. On obstetrics, Dr. J. D. Guess from Greenville. Eye, ear, nose and throat, I had asked Dr. Walter Bristow to fill in there. Come up and fill in for us, Dr. Bristow, and answer any eye, ear, nose and throat questions, please. Pediatrics, we asked Dr. C. W. Bailey, Spartanburg and since he isn't here we are going to work some of our authorities and make Julian Price get up and answer anything. There you are, eight of them. (Applause.)

Dr. Heyward: This first one seems to fall under Dr. Lynch's direction. (1) With a Grade II Squamous Epitheliama of lower leg and no groin metastases, what should be done—X-ray or amputation?

Dr. Lynch: A—Depending entirely upon the lesion, the extent of the lesion. You might excise, otherwise X-ray, last I would say amputate, in order, depending on the extent of the lesion. You have not demonstrated the central extension of the metastases. By "excise" I mean complete excision.

Dr. Heyward: No. 2 falls to Dr. Guess.

Q—Doctor, in a Cesarean section would it not be a better procedure to deliver the head with forceps, rather than deliver by breech to prevent the infant from inhaling fluids?

Dr. Guess: A—Gentlemen, the answer to that question would depend rather considerably upon whether the baby was presenting as a breech or as a head presentation and whether you were doing the classical incision of the cervix or whether you were doing the trans-cervical delivery, the trans-cervical operation.

In the delivery by the classical operation, the incision is made through the uterus and if in such an operation the baby is presented by the head it would be best to deliver the head by the forceps, rather than doing an internal version. If, on the other hand the low trachelotomy was done, with the head presentation, it doesn't make any great difference if the head is delivered with forceps or with the hand or with a trowel-like instrument that can be gotten. The head is delivered first in any of those instances. Now, on the other hand if the baby presents by breech and you do a classical operation with the incision through the uterus, the head would naturally be the first part delivered and you deliver that with forceps or deliver it with the hand by pressure on the sides of the uterus or by lifting the head out with the hand. You must take into consideration the part of the baby that is presenting in the particular incision of the uterus that you have made, and that would be the determining factor. Now, whether the baby will inhale the amniotic fluid is not of great moment because the delivery of the baby from the uterus, after the uterus is opened, is a momentary procedure. It takes only a moment if the incision is adequate and if you know how the baby does lie and you plan your removal adequately; so those are facts that must be taken into consideration and that question can not be categorically answered either "yea" or "nay."

Dr. Heyward: The next question falls to Dr. Kredel.

Q—What are the essentials of success in doing full thickness skin grafts?

Dr. Kredel:

A—I presume this question means free skin grafts and not pedicle flaps. The easiest one to make is the small pinch or thin grafts in sheets. Split grafts come next in line, they are fairly safe. The full thickness grafts are the most difficult, to secure a successful take. On the other hand, they give the best cosmetic results of the skin over the grafted area.

There are several conditions that must be fulfilled to successfully transplant a full thickness of skin. In the first place the bed of the graft must be in shape to take it. The bed of the graft should be a healthy granulated surface. Infected granulations make a poor source of any blood supply to the grafted skin. It is necessary, therefore, if there is any infection in the granulated surface to reduce the infection before the operation. This may be accomplished in a number of ways and there should, of course, be free drainage. Chemical antiseptics are of some but rather limited value. Frenquent changes of moist dressings seem to give the best results and over a period of days will succeed in cleaning up dirty tissue upon which the graft is to be placed. If strong chemicals are avoided the graft is more likely to be healthy. Simply moist saline dressings are perhaps the best to achieve desired results, although where severe infection is present the sulfonamide and various other compounds have their value. In other cases, before applying full thickness skin graft, moist saline dressings should be applied for several days. One, I think, judges more by the appearances of the graft on inspection than by any complicated laboratory studies, such as bacterial counts on the surface. Good healthy red granulations, which bleed readily, are the signs of a healthy base. So much for the preparation of the surface.

The second point is that only the skin should be used in the full thickness graft. In other words, all subcutaneous fat should be carefully cleaned off before the graft is applied. This full thickness graft is placed on the surface. Thus the point is to clean off all subcutaneous fat.

The third point is provision for drainage. There is bound to be some exudate. If the graft is of large size, particularly, piecrusting incisions or small perforations should be made in the graft to allow for seepage.

The fourth point, adequate fixation is accomplished in several ways in full thickness grafts. It is usually advantageous to use sutures around the periphery fastening it to the surrounding skin so that the graft can not move until it has a chance to get a take. The second method of fixation is by proper dressing. I may interpose here that the dressing that is applied is the most important part of any skin graft operation. The type of dressing should be of a kind that will not allow any

motion on the grafts for a period of as long as a week after it is applied. The dressing applied immediately on the surface of the graft should be thin and soft, only one or two layers of gause, moistened in salines, and over that is applied adhesive tape well over the normal skin and holding the first layer of dressing firmly in place. If possible this dressing should not be disturbed for a period of a week. Another point in helping a successful take is a pressure dressing. Exudation is minimized and the chances of adhering are better if a mild degree of pressure is applied over the skin graft. This can most readily be accomplished by using a sponge. Sterile sea sponges can be used, they tend to get stiff but they are all right and should be sterilized by chemical means. More handy is the ordinary rubber sponge one buys. It can be split in half and makes an excellent pressure dressing over a skin graft, held in place by adhesive.

The last point is, don't change the dressing, put a good dressing on and leave it on seven to ten days and you will have a better chance of not losing your graft.

Dr. Heyward: I have a question for a pediatrician.

Q—Why do not more mothers nurse their babies? What part does tobacco and alcohol play in breast feeding?

Dr. Price:

A—Frankly I don't know why more mothers do not nurse their babies. I doubt if over 10 percent of the mothers nowadays, who belong to the same social set you and I do, nurse their babies. Those on the farm and the colored women do. It may be the type of life women are living today. It is not true that they simply do not want to nurse their babies, a great many do. As to alcohols and tobacco, I think it has been pretty well proven that tobacco in moderation, that is, five to ten cigarettes a day, does not have any effect, but a person who smokes one pack or more a day would probably have a dimunition in the supply. As to alcohol, unless a person drinks quite a bit I don't think it has been proven that alcohol, per se, in the case of a lactating mother has any effect on the supply of the milk. Those are facts worked out by studies and not just ideas somebody has hatched up.

Dr. Heyward: They tell me Dr. Fedder from Anderson can give us the answer to this next question, headed "Home Defense."

Q—In case of a catastrophe where may blood serum be obtained for victims?

Dr. Fedder:

A—I presume that the questioner refers to blood plasma instead of serum. As you know, reduced to its simplest terms, plasma is that portion of the blood which can be separated from the cells if the substance has been drawn into a suitable anticoagulant. This separation can be accomplished either by centrifugilization or sedimentation. The former requires ten days but the latter can be accomplished in a matter of hours. We use sedimentation both from the time saving element and the fact that we do not have available a suitable centrifuge which by the way costs about seven hundred dollars. I refer to time saving as once the blood is collected it is placed in the ice box and requires no further attention until time arrives for removing the supernatant plasma.

We use the Abbott equipment in our work and find that we can place a pint of finished plasma in storage at a cost of $1.75 which is far below that of other methods and in addition, the glass ware, bottles, etc., can be used over and over again.

The fact must not be lost sight of that whatever the method of preparation, the finished product is a biological intended for intravenous injection. This implies all gradation of diseaster to the victim unless the maximum of vigilance is excercised in its preparation. When one attempts to process plasma it presupposes at least elemental knowledge of the preparation of biologicals and what is more important, sufficient bacteriological training to properly carry out the various sterility and safety tests required by good laboratory practice—and the regulations of the Division of Biologics Control of the United States Public Health Service.

Our procedure calls for collecting the blood into an equal volume of Muether's Solution (buffered Saline, Citrate, Dextrose mixture) allowing the cells to sediment at a refrigerator temperature of from 5 to 9 C. for ten days

and then under rigidly enforced bacteriological sterility, (this differs from ordinary "surgical sterility") the plasma is siphoned into "pooling jugs." We formerly withdrew each flask of plasma individually and dispensed according to type but the ruling of the Division of Biologics control frowns upon this and requires pooling.

The pooling jugs are returned to the refrigerator for two days and the product is then placed in storage flasks. At this time comprehensive sterility tests are carried out. Fortunately, with several recommended preservatives and without any, our contamination rate has been nil.

The time assigned does not permit a comprehensive review of our technique but any one interested will find a warm welcome in our laboratories in Anderson and in the event that some small hospital in the state desires to enter into the work, we could possibly assign a girl trained in the method to spend a couple of days with them.

We believe that our method of procedure has the economic and time saving element to recommend it. As stated before, the finished product costs less than $1.75 a pint, and the glass ware and basic equipment which has been figured into this remains for future use.

We have been asked about the amount to prepare for use in these troubled times. As you know, all of us who have hospitals under two hundred bed capacity are not eligible for governmental aid. However, the ratio of one pint of plasma to each hospital bed as recommended by the Council for Civilian Defense has been adhered to.

It is believed that the simple and economical technique used by us will find ready acceptance by most reasonably well trained laboratory workers. It cannot be overemphasized that, contrary to an impression that has somehow gotten abroad, there is no "simple" or for that matter any other type of plasma processing that can be safely entrusted to the hands of the ill trained or careless.

Using the Anderson County Hospital method, it will be found that a good technician can do all of the work required to keep the plasma pool in suitable condition by devoting about two extra hours a week to this activity. Very small hospitals should have access to a central station to which they could send their blood and have it processed into plasma and returned. I do not know whether this would be the job of the Board of Health or some civilian agency, but there is certainly a need for this throughout the nation.

I repeat that the subject of plasma collection and transfusion cannot be adequately approached in this brief period, but I will be glad to attempt to answer any questions that might be asked from the floor.

(There were no questions.)

Dr. Heyward: I have a question sent up here.

Q—Is a solution of sulfathiazole of any value in treating nasal infections? Dr. Bristow.

Dr. Bristow:

A—Those of you who read the daily papers know that this solution of sulfathiazole has been given a great deal of publicity in the health columns. Those of you who heard Dr. Barker's presentation this morning will notice that on one of his cards he had indicated that the sulfonamides were of little good in the treatment of chronic nasal sinusitis. The use of a solution of sulfathiazole being put in contact with mucus nasal membranes may have some slight bacteriolytic properties but not to be compared with the bacteriolysis you would obtain from oral administration of the drug and getting the drug in contact with the bacteria by way of the tissue fluids. The solution that is used locally in case the patient insists on having it is 5% solution of sodium sulfathiazole.

Dr. Heyward:

Q—Treatment of 13 year old girl with persistent menorrhagia who has thrombocyto penic purpura.

Dr. Guess:

A—First we should try to find out the cause of the purpura. We should rule out infection and rule out factors that might interfere with absorption of calcium and vitamins, and sometimes this is very difficult to find out, and the menorrhagia would probably have no direct effect upon it. The laboratory studies would help you and I won't go into that for when you get into these laboratory features

we become very technical. At this time all I can say is, competent hands should have this case to find the cause of it.

Dr. Heyward:

Q—Have all other urinary antiseptics gone out of style since the sulfonamides came in or are some of them still of value?

Dr. Finklea:

A—Apparently they have. There are a lot of them. With the appearance of the sulfonamides in the field of surgery it has greatly facilitated our treatment of the urinary tract. I can say, however, that all of the urinary antiseptics have not been discarded in favor of the sulfonamides. There is today a great tendency with all of us when the patient comes in with infection, to write a prescription for one of the sulfonamides for a certain length of time and to invite the patient back to the office to see what has happened. Quite often this proves satisfactory. But the other urinary antiseptics have not been discarded altogether. We have mandelic acid, which is used largely in certain types of infection where we want to lower the PH of the urine and keep it down, most notably in the colon bacillus group where we know these bacteria do not multiply very rapidly, when the acidity of the urine is kept low. Urotropin is used a great deal. Next to these we have the drugs brought out a few years ago, the so-called analin dye preparations, which give good results in certain types of infection, but this is a very small group.

Dr. Heyward: The next question here says:

Q—Please discuss "once a Cesarean always a Cesarean" and possibility of safe delivery after one Cesarean?

Dr. Guess:

A—"Please discuss it," that would take perhaps longer than the time we have given to this to fully and completely discuss it, but I think I can abbreviate it within the limits of our time. The old doctrine came into being many years ago, once a Cesarean always a Cesarean. At that time two factors were present that are not always present at this time. The first was the almost universal operation was the so-called classical or the transfundal operation; the second factor was that Cesareans were done or were supposed to be done under very definite occasions. They were not done for the convenience of the patient or the convenience of the doctor. Since that time I believe the reasons for Cesarean sections have been broadened out to infinity. And the laparoto-trachelotomy operation has come into vogue and is used more and more widely by the general surgeon. It goes without saying that if the first Cesarean operation was done because of a disproportion between the head of the baby and the woman's pelvic canal and the head of the baby was presented normally, from that time on if that woman was to have a baby she would have to be delivered by Cesarean because it would be just as hard for her to deliver through that same pelvis the second time as it was the first time. The same thing applies if the distortia is caused by some other permanent condition. But, on the other hand, suppose the Cesarean is done because of some emergency, suppose it is done in pre-eclampsia or eclampsia to bring about a rapid delivery; or suppose it is done to pull out the cord, then those conditions may not and will not probably obtain in the second pregnancy. I think it can be stated, fairly definite, this way—if a woman has had a low Cesarean section for a condition as obtained only in that particular pregnancy and if her convalescence was a febrile, then it is safe, reasonably safe to allow her to deliver from below in a second pregnancy. I practice and use that as a basis in my practice. If on the other hand she had a classical Cesarean section the risk is very much greater although it can be tried. The risk is very much greater and she is likely to have a rupture of the scar if she has had either the classical Cesarean section or the laparototrachelotomy; and if she had a febrile puerperium there is a chance, unless the cause of the fever is definitely known to be affecting some other location, there is a definite chance that the infection was in the womb and that it involved the incision through the uterus and that the scar is dead and a chance of rupture is likely. You will have to take all of those things into consideration and don't think the man is a fool or a dare devil if he tries to have his patient deliver from below if he is careful

and has studied his case. He may be wiser than the man who is criticising him.

Q—(From the floor) How many Cesareans would you advise a woman to have who couldn't deliver any other way except by Cesarean section?

A—I will answer that question in this wise. A good many years ago I assisted a prominent obstetrician in the city of Philadelphia to do the 7th Cesarean section on that particular patient. She was an Irish Catholic, it was against her religion to use contraceptives and she could not deliver except from above. I asked whether he was going to sterilize her and he said, "I can't, it is against the law of the church." I asked how many more would she have and he said she is 37 and the law of averages will probably give her five or six more.

Dr. Heyward:

Q—What are the usual defensive forces of a syphilitic pregnant woman that tends to prevent the fetus from becoming infected until the 3rd to the 5th month of pregnancy?

A—By Dr. Lynch: I don't know. I wouldn't at all like to indulge in an extemporaneous discussion of something I can't honestly say I know anything about.

Dr. Heyward:

Q—In giving Diptheria Pertussis Vaccine do you advise giving an additional dose of plain Pertussis Vaccine?

Dr. Price:

A—Some are advising at the present time that they give Diptheria and Pertussis Vaccine together. A great many have not adopted this procedure. Personally I think it better to give them separately. I give two doses of Diptheria Toxoid, preferably with an interval of one or two months after I have already given the Pertussis vaccine. I believe the mixture of Diptheria toxoid with Tetanus toxoid is preferable to the mixture of the Diptheria toxoid with Pertussis vaccine.

Dr. Heyward:

Q—What is the difference in an "R" unit, a millegram hour or a mille-cure' in the measurement of Radiant energy?

Dr. Pitts:

A—Since nobody seems to know anything about it I will take a shot at it. These are all measurements of radiant energy, radio activity. The "R" unit is the international unit of measurement of X-rays or Roentgen rays. The millegram hour is the unit of measurement of radium salt activity. And the mille-cure' is the measurement of radium emanation.

Dr. Heyward:

Q—The local treatment of furunculosis of ear canal. Value of Sulfonamides.

Dr. Bristow:

A—If the condition is a true furunculosis the etiology in the large percentage of cases is due to a skin infection with staphylcoccus organism. The local treatment consists largely in cleansing the canal of the ear with the application of a bland ointment containing sulfathiazole. The rest of the treatment consists in the internal administration of one of the sulfonamides, preferably sulfadiazine. If the furunculosis has been of long duration the chances are that you have a mixed infection and very frequently you have a mycotic infection superimposed on the simple furunculosis and in that case the treatment should be determined by a microscopic examination of the secretions from the ear.

Dr. Heyward: This next question is genito-urinary.

Q—What urinary antiseptic do you use in infections with Bacillus Proteus?

Dr. Finklea:

A—That question is fairly easy to answer. We use them all and expect very little results from any.

Dr. Heyward: I have a question here.

Q—If a pregnant patient has some infection, is it safe to give her the sulfa drugs in the usual accepted doses?

Dr. Guess:

A—I have never heard the safety of the administration of these drugs to pregnant women questioned by anyone who has had any experimental or broad experience in their use. I have been asked that question many times by many men who haven't had these opportunities. Personally I have used them and I haven't seen any ill effects on the patient. Therefore,

I say it is safe and I advise you to use them.

Dr. Heyward:

Q—What effect does the administration of thyroid extract have on milk production during the puerperium?

Dr. Guess:

A—I can answer that almost as quickly as Dr. Lynch answered a question he was asked a while ago. Perhaps this is a modification. Does the person have in mind the woman who has a condition of hypothyroidism and is he administering it as a part of her general care? By bringing her general metabolism to par this would make her more likely to produce milk in a way a normal woman would,—but, if he has in mind the giving of it as a milk producer, —I don't know, I think probably it would have no effect whatsoever.

Dr. Heyward:

Q—Is it safe to give the nursing mother full doses of the sulfonamide drugs?

Dr. Guess:

A—The sulfonamides are excreted to some extent in the milk. On the other hand the baby, in my opinion, will not get enough sulfonamides to have any deleterious effects on the baby unless the baby has an idiosyncrasy for the drugs. Therefore, if the mother is suffering from a condition which indicates the administration of these drugs I would certainly administer the drugs and I would not take the baby off the breast, if she should have milk for her baby.

Dr. Heyward:

Q—What is a curative treatment for chronic eczema of external auditory canal?

Dr. Bristow:

A—I don't know of any curative treatment. The treatment would resolve itself into a determination of the etiology. A chronic eczema of the auditory canal is a symptom complex which may be due to a number of causes. It may be an infection of mycos organism of the skin; it may be auto mycoses, or it may be a neurotic manifestation. The treatment would depend entirely on the etiology.

Dr. Heyward:

Q—Discuss sulfonamides as the causative factor in urinary calculi?

Dr. Finklea:

A—The exact cause of the urinary calculi formation during the administration of urinary sulfonamide has not been definitely determined. Some of the patients will develop urinary calculi with relative small doses while other patients can take enormous quantities and have no bad effects whatsoever, so far as formation of stone is concerned. We have been advised to give these patients, during the time they are taking a sulfonamide some alkalies, either baking soda or some other similar preparation. This is supposed to act in the way that it prevents the precipitation of the sulfonamide salt in the urinary tract. Just what part it plays I personally do not know. It might be upon the principle that a urine with high acidity will cause more precipitation than a urine with low acidity. The calculi might be found during the administration of sulfathiazole, sulfapyridine, and sulfadiazine. So far, I have not seen any report of the calculi following the use of sulfanilamide, itself. The treatment of these calculi is, during the administration of the sulfonamides it is wise to examine the urine frequently to see if there are any crystals in the urine because the precipitation is first shown through the crystals. If this is done then you are reasonably sure to catch the formation of the calculi before they get large enough to cause any damage. Patients with fever are able to take much larger doses of sulfonamide drugs but one should be very careful to reduce the dosage when the temperature begins to fall, otherwise stones are more likely to form. The treatment for these calculi, once they have formed, is to irrigate the urethra, bladder and kidneys, wherever the calculi are located, with normal salt solution, about 106 degrees farenheit. These calculi are fairly easy to dissolve if tackled early and not allowed to become a mixed stone.

Dr. Heyward:

Q—What is the present treatment of dysmenorrhea in case of no demonstrable abnormality, and particularly the value of testosterone in this treatment?

Dr. Guess:

A—I was afraid somebody would ask a question about dysmenorrhea, and not only

did he ask it but he gave it in such a way that it would take probably 30 minutes to discuss it.

Testosterone in its action on the female uterus probably asserts its action on the anterior pituitary gland and through that action on the normal activity of the ovary itself so that given sufficient testosterone and worked through the cycle, first on the pituitary gland and then on the ovary, it tends to reduce ovarian activity. Now, this is a fact that is known to all of you, that the women who have meno-metrorrhagia without ovulation do not have painful bleeding, whereas if they have a normal period they may have painful bleeding. Testosterone tends to inhibit the formation of corpus luteum and tends to give the type of bleeding which is similar to the type of bleeding which occurs in menometrorrhagia. It has been further found that frequently testosterone administered regularly during the menstrual cycle will cause one period of painless bleeding and a second period of painful bleeding, alternating because of the fact that testosterone's action is not continuous. Ovulation will be inhibited in alternating cycles. Coming back to the first part of the question, what is the treatment of essential dysmenorrhea, it is tied to so many different factors, many of which are psychogenic, it takes all the tact and experience and therapeutic experimentation to work out a satisfactory treatment. Frequently, giving a placebo will relieve a dysmenorrhea. Sometimes going to a houseparty at the beach will give them relief when nothing you can give them at home will do it.

Dr. Heyward: I have one final question for the whole board up there together, see if anyone can answer. Before we give this question, we are under great obligation to these gentlemen for having come up here and Dr. Price wants to know what you think of it. It is something new. We are trying it, if you like it we will have it next year. Write and tell us if you like it or not. If you think it is rotten, say so. We would like to have an expression from any of you, one way or the other.

This question is for the whole board:

Q—Why do Negroes not become morphine addicts?

A—Is that statement a fact? Where they are so economically situated that they can obtain it? I am answering a question with a question. Is that a fact where they are so situated, economically, where they can secure it, is that a fact?

Dr. Heyward:

Q—Is there anyone who has colored patients who are addicts?

A—(two)

Q—Is there anyone on the Board who cares to answer that? If not, gentlemen, we have enjoyed having you and the party is over.

(Meeting was adjourned until the banquet at 8:00 P. M.)

Names of 46 applicants for licenses to practice medicine and surgery in South Carolina who passed the June examinations were announced by the board of medical examiners. They are:

R. F. Allison, Columbia; Abram Berry, Columbia; W. S. Bradley, Jr., Greenville; G. W. Brunson, Jr., Orangeburg; F. M. Burdette, Jr., Simpsonville; Hubert Claytor, Second, Hopkins; T. R. Cobb, Jr., Augusta, Ga.; G. O. Creed, Camden; J. H. Erwin, Mobile, Ala.; E. D. Guyton, Marion; T. G. Herbert, Jr., Charleston.

R. C. Horger, Eutawville; W. K. Kerr, Abbeville; J. H. Kirby, Jr., Mullins; G. R. Laub, Columbia; J. W. League, Charleston; F. B. Lee, Scranton; R. W. Lominack, Newberry; S. G. Dowe, Jr., Blackville; W. C. Marett, Jr., Seneca; W. D. Martin, Mullins; F. A. McIver, Darlington.

H. W. Mead, Gaffney; J. C. Mills, New Orleans, La.; B. M. Mixan, Jr., Yemassee; G. F. Mood, Jr., Charleston; J. W. Murray, Jr., Charleston; M. L. Nelson, Jr., North; W. J. Nelson, Spartanburg; G. D. Page, Greenwood; J. R. Paul, Jr., Charleston; W. H. Powe, Jr., Greenville; N. C. Price, Orangeburg; J. A. Quinn, York; R. W. Qusenberry, Charleston.

L. D. Rhodes, Estill; A. C. Smith, Jr., Glenn Springs; W. M. Snoddy, Jr., Fairmont; G. H. Stokes, Charleston; J. T. Stokes, Charleston; W. B. Townsend, Charleston; W. R. Tuten, Jr., Fairfax; Ancrum Waring, Jr., Charleston; L. A. Wilson, Jr., Charleston; C. H. Workman, Jr., McCormick; C. S. Wright, Columbia.

THE JOURNAL
OF THE
South Carolina Medical Association

EDITOR

Julian P. Price ..... Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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AUGUST, 1942

JUSTLY PROUD

The people of South Carolina should be proud of their physicians.

They should be proud of those medical men who are now serving in the armed forces of the United States. Elsewhere in this Journal is printed a list of those men who are now in uniform and on the front cover is a map showing the number who have left from each county. So far as we can determine no state in the union has contributed a higher percentage of physicians for military duty than has South Carolina. In practically every instance these physicians have made sacrifices to join the Army or Navy but they have done so without complaint.

They should be proud of those physicians who are now practicing in the cities, towns and hamlets of this commonwealth. A large proportion of these have indicated their willingness to don the uniform but the civilian need for their work is so great that they have been asked to stay where they are. Many of these men are anxious to join their comrades in the Army or Navy but the call of duty forces them to continue the daily unexciting task of practicing medicine at home. Should events develop which necessitates their joining the armed forces they will respond to the call without delay.

Yes, the people of South Carolina have a right to be proud of their physicians and we are proud to recognize them as our colleagues and friends.

MEETINGS

Those who are privileged should recognize the responsibility which goes with privilege. This belief was paramount at a recent meeting of Council.

After careful consideration Council decided to advise a continuation of county medical meetings but suggested that all district medical meetings be discontinued for the duration of the rubber shortage. Each Councilor was asked to convey this news to his own district and the secretary was instructed to send official notice to certain groups.

This action is in line with an editorial which appeared in our last issue and we wish to bring this to the attention of our readers as an official suggestion of Council.

THE ISSUES

The South Carolina Medical Association has never engaged in politics and it is our fervent hope that this organization never will. The members of the Association, however, and the Association itself are vitally concerned in all matters pertaining to the public health and to the medical welfare of the people of this state.

With this in view the Council in joint session with the Legislative Committee instructed the secretary to send a letter to the candidates for high office asking for a statement listing their views on vital matters.

The following letter was sent to the two candidates for Governor:

"Gentlemen:

"The members of the South Carolina Medical Association are vitally concerned in all matters pertaining to the public health and to the general medical welfare of the people of the state. Consequently, they are keenly interested in the views expressed by candidates for high office.

"Since it is impossible for you to talk with each physician in the state and to answer his questions, I am glad to offer my office as a medium through which you may express yourself. I will be glad to receive a statement from you, setting forth your views concerning general medical affairs, and to send this statement to each member of our Association without editorial comment.

"Might I suggest that, in your statement, you make know your views concerning;

"1. The Medical College of the State of South Carolina. Should the present high standards of education at that institution be maintained, even if it means increased appropriations?

"2. The lowering of requirements for candidates for examination before the State Board of Medical Examiners. Should the present high requirements be maintained or should they be lowered to include graduates of non-accredited medical schools?

"3. The relationship of the Federal, state, and local government to the care of the indigent sick. Is the medical care of the poor a prime function of the Federal Government or is it the direct concern of state and local governments?"

The following letter was sent to the candidates for the office of Senator:

"Gentlemen:

"The members of the South Carolina Medical Association are vitally concerned in all matters pertaining to the public health and to the general medical welfare of the people of the state. Consequently, they are keenly interested in the views expressed by candidates for high office.

"Since it is impossible for you to talk with each physician in the state and to answer his questions, I am glad to offer my office as a medium through which you may express yourself. I will be glad to receive a statement from you, setting forth your views concerning general medical affairs, and to send this statement to each member of our Association without editorial comment.

"Might I suggest that, in your statement, you discuss your beliefs regarding the relationship concerning the Federal, state and local government to the medical care of those in the low income group.

"Is the medical welfare of the poor a prime function of the Federal government or is it the direct responsibility of state and local governments?

"Should projects for medical care of the poor be undertaken by the Federal government or should they be administered by local or state agencies with financial aid from the Federal government if necessary?

"Should hospitals be built for local communities under direct Federal supervision and control or should they be built by local or state agencies with loans or grants in aid from the Federal government?

"Should effort be made to retain, so far as is possible, the private-patient, private-physician relationship or should efforts be made to place more and more of the sick under the care of salaried physicians with salaries being paid by the government?"

Replies from the two candidates for Governor are printed in this issue of The Journal.

When the statements have been received from the other candidates they will be mimeographed and a copy sent without editorial comment to every member of the Association.

It is suggested that members of county societies, in a group or as individuals, discuss these questions, listed above, with the candidates for congress and for the legislature and to acquaint them with the stand which the medical profession of this state is taking along these lines.

The Candidates Speak

Spartanburg, S. C.
July 25, 1942.

Dr. Julian P. Price, Sec.,
S. C. Medical Association,
Florence, S. C.

Dear Doctor Price:

This is to acknowledge your good letter of July 23rd. Since I am exceedingly interested in the medical association and the medical men of S. C., I am pleased to answer the questions set out in this letter.

In answer to question number one, I want to say emphatically that I am in favor of keeping the standards of education at the Medical College of South Carolina on the same high plane as they now exist even if it means increased appropriation. You will find if you look in the record that while I was Governor I recommended additional appropriations for improved buildings at the Medical College. The bill was passed and was signed by me.

In answer to question number two, I will say that I think the present requirements of the State Board of Medical Examiners should be maintained.

In answer to question number three, I do not think that medical care of the poor is a prime function of the Federal Government. I do feel that the government should aid us in stamping out diseases and epidemics such as venereal diseases, infantile paralysis and such. I do not feel that the government should take over the medical care of our people any more than I think that they should take over the law practice, away from the lawyers.

I realize that having so many of our young doctors called into service has handicapped many of our communities and no doubt there are those who would be willing to let down the bars during this emergency, but I cannot believe that anyone who has the welfare of our people at heart could think that the ends would justify the means.

With all good wishes to you and your association, I am,

Yours sincerely,

Olin D. Johnston.

Sumter, S. C.
July 27, 1942

Hon. Julian P. Price, M.D.
Secretary,
South Carolina Medical Assn.
Florence, South Carolina

Dear Sir:

I am happy to acknowledge your letter of July 23 relative to public health in South Carolina.

I know well of the vital interest of your members in the medical welfare of our people. I know, also, of the wonderful work your profession has done. Every consideration should be given your association, therefore, in such questions as you have enumerated.

On question No. 1, I would demand that high standards at that institution be maintained; yes, no matter if higher appropriations are necessary. Furthermore, I wish to say that I think higher appropriations are necessary and should be provided.

On question No. 2, it should be strictly understood that the present high requirements before the State Board are to be maintained. No recognition should be given graduates of non-accredited schools.

On question No. 3, I prefer to place my faith in State and local government. We know our own people, we know their problems and I regard socialized medicine or anything like it a menace to our people.

I hope that my views have been clearly expressed and you may be sure that I intend to be consistent and vigorous in upholding them. Should further questions arise, I will be glad to assert myself and the attitude of your association will always be considered by me as of prime importance.

Sincerely yours,

Wyndham Manning.

South Carolina Physicians in Service

(July 24, 1942)

The following list of physicians has been compiled from official lists published earlier this year, from reports of county medical society secretaries, from newspaper clippings, and from personal communications. Every effort has been made to make the list accurate but there may be a few mistakes and readers are asked to notify the secretary of any discrepancies.

A word of explanation may be necessary with regard to some of the men whose names are listed. A man in service is officially listed as coming from South Carolina when he gives this state as his home. Thus, when Dr. John Smith of Columbia, interning in New York, enters the service he can give either New York or Columbia as his last address. If he gives New York he is listed as a physician from that state but if he gives Columbia, he is listed as coming from South Carolina. Although some of the names in the list below are of physicians who have never started to practice in South Carolina they are South Carolina physicians none-the-less and if they were not in the Army or Navy they would probably be in this state.

The numbers on the map on the front cover are as of July 24th and are subject to change without notice.

Abbeville County
McLane, Francis C.
Poliakoff, Abraham E.
Rosenberg, George
Ward, A. C.

Aiken County
Brooks, T. G.
McNair, Wallace

Allendale County
Preacher, A. B.

Anderson County
Browne, Samuel M.
Dendy, Wm. S.
Goodlett, O. M.
McBrearty, John D.
Moseley, Chas. H.
Rainey, John F.
Robertson, J. W.
Robinson, John F.

Bamberg County
Cleckley, J. Jennings
Stuckey, Charles L.

Barnwell County
Cone, Wallis D.

Beaufort County
Gaillard, Peter C.
Jones, W. B.
Keyserling, B. H.
Rubinowitz, A. M.

Berkeley County
Lawther, F. R.

Calhoun County
No physicians in Service

Charleston County
Baker, Robert J.
Ball, W. J.
Barnwell, E. H.
Bowen, Harold J.
Brockington, W. S.
Brown, Alton G.
Buist, A. J., Jr.
Burn, Edward M.
Burnet, Burgh S.
Cathcart, Hugh
Chamberlain, O. B.
Cox, Marcus E.
Evans, Ira C.
Hirschmann, Victor R.
Jenkins, P. G.
Knoblauch, Frederick
Koontz, L. A.
Lee, Robert E.
Linton, I. G.
McInnes, George F.
Moorman, V. R.
Parker, Edw. F.
Pope, Madison R.
Reeder, Oscar S.
Regan, John W.
Reynolds, Thos. W.
Rice, Earle, M.
Robertson, Henry C.
Rogers, Wilbert K.
Stack, David R., Jr.
Vunk, Raymond H.
Walker, W. H.
Watson, Walter H.
Wellbrock, W. L. A.
Wilson, Isaac R.

Cherokee County
Baier, George F.
Pittman, John G., Jr.
Thomas, J. P.

Chester County
Chance, F. S.
McConnell, Harvey E.

Chesterfield County
Lucas, Thos. L.

Clarendon County
Howle, Myron G.
King, Joseph H.

Colleton County
Black, H. M.
Brown, Geo. C.
Moore, Henry W.
Zalin, Jacob

Darlington County
Coleman, Marshall J.
Timmerman, Wm. B.

Dillon County
Bethea, W. S.
McMillan, Carl
Rosenfeld, Abraham P.

Dorchester County
Miles, Louis S.

Edgefield County
No physicians in Service

Fairfield County
Buchanan, John C.
Turner, James D.

Florence County
Adams, Edward M.
Barnwell, John B.
Bethea, James A.
Charles, R. K.
Hanahan, Ralph B.
Harrison, A. F.
Holman, James M.
King, Lebby B.
Mobley, M. R.
Smith, Geo. C.
Stith, Robert B.
Sullivan, E. N.
Timmons, T. A.
Walsh, John K.

Georgetown County
Lacey, Wm. H.
Sinu, J. R. S.

Greenville County
Bell, J. W.
Brown, Robert A.
Converse, J. I.
Edwards, Wm. W.
Fair, Chas. H.
Henrn, Paul
Horger, Edgar O.
Lipscomb, Jas. E.
McLawhorn, Bernyrd C.
Parker, Thomas
Poole, Everett B.
Ramsey, Allen B.
Searborough, Asa M.
Simmons, W. W.
Smith, Hugh
Smith, Keitt H.
Topp, Olfert W.
Warner, W. P., Jr.
Whitworth, Horace M.
Wyatt, Chas. N.

Greenwood County
Adams, A. E.
Bishop, Walter G.
Durst, George G.
Holloway, W. J.
Royal, H. G.
Schneider, L. A.
Williams, J. P.

Hampton County
Larisey, Carr T.
Lawton, Wm. H.

Horry County
Green, D. W.
Johnson, Julius D.
Marshall, James M.
Rourk, Henderson

Jasper County
Finkelstein, David J.

Kershaw County
Brunson, Joseph W.

Lancaster County
Carnes, W. C.
Corcoran, Edwin E.
Crawley, J. D.
Lippert, K. M.

Laurens County
Anderson, C. W.
Blalock, Geo. R.
Dusenberry, Jas. F.
Graham, B.
Jeanes, Jas. G.
Jones, F. Dudley
McGowan, Robt. P.
Moorhead, Wm. H.
Parks, Richard H.
Wilkes, Samuel M.

Lee County
Cousar, John B.
Keels, Lucius B.

Lexington County
Henry, Hector H.
Woods, Clarendon B.

Marion County
Finger, Elliott
Hankins, T. C.
Michie, Donald E.
Smith, Robt. C.
Weston, I'On L.

Marlboro County
Barber, Ed.
Barnes, L. P.
Evans, Wm.
Kinney, P. M.
McCall, Chas. S.
Lipscomb, Paul
Hamer, A. W.

McCormick County
No physicians in Service

Newberry County
Driscoll, Robt. H.
Epps, Geo. L.
Houseal, Robt. W.
Welling, Arthur W.

Oconee County
Booker, John P.

Orangeburg County
Marcus, Hyman
Thackston, L. P.
Wolfe, Albert B.

Pickens County
Jeanes, Robt. P.
Poole, L. R.
Valley, T. P.
Woodruff, P. E.

Richland County
Ball, Robt. W.
Barron, Wm. T.
Bennett, T. W.
Callison, H. Grady
Chapman, Chas. G.
Chappel, Buford S.
Cuttino, John T.
Davis, J. McMahon
Dotterer, Thos. D.
Fouche, Jas. W.
Fox, Wm. M.
Fuller, Lawrence
George, W. E.
Hall, Henry F.
Hutchinson, Manly E.
Josey, Allen I.
Josey, Richard B.
Kronrad, Lorenz
Law, Edward H.
Lide, C. M.
Matthews, Rudolph S.
Miller, Samuel E.
Mayer, Orlando B.
Oliver, Benjamen M.
Pirkle, Jas. C.
Plotkin, Oscar M.
Pratt, John M.
Richard, Dalbert
Schayer, Isadore
Seastrunk, Jesse G.
Shaw, Jas. G.
Waddell, Henry G.
Wilson, Harry F.
Workman, J. B.
Mamin, Harry

Saluda County
No physicians in Service

Spartanburg County
Able, LeGrand G.
Allgood, James E.
Bolgla, Julius H.
Colquitt, Alfred O.
Crow, Fred
Crow, Robt. H.
Hammond, Gaines W.
Herbert, Wm. C.
Jamison, Andrew M.
Kalil, Charles
Painter, W. W.
Phifer, I. A.
Poole, C. H.
Poole, Harold L.
Price, Geo. W.
Scott, W. S.
Smith, D. L., Jr.
Temples, P. M.
Walker, Howard
Wallace, John B.
Watkins, J. O.
Way, Roger A.
Whitworth, Clyde W.

Sumter County
Calder, Alexis B.
Huth, P. E.
Morse, Stanley F.
Weinstein, Howard I.

Union County
Owings, Francis P.
Scott, James
Stevens, A. H.
Switzer, P. K., Jr.

Williamsburg County
Sanders, Keith F.

York County
Bratton, J. R.
Brown, A. G.
Gaston, Frank P.
Hart, W. Lee

Pathological Conference, Medical College of the State of South Carolina

KENNETH M. LYNCH, M. D., PROFESSOR OF PATHOLOGY

CASE OF DR. ROBERT WILSON, JR. ABSTRACT NO. 454

Student Stokes (presenting):

Present Illness: This 45 year old colored man was admitted with chief complaint of "pain in stomach" of two days duration. He gave a history of occasional bouts of abdomnial distress for about a year and had also experienced mild precordial pain on exertion over the same period. On 11-22-41, nine days before admission, he began a job of unloading fish scrap from a boat at a fertilizer plant. He wore no mask and the odor was very offensive. He felt very well until five days later, 11 27-41, when he began to experience general malaise, a little feverishness, anorexia, nausea and abdominal discomfort. On the same day someone remarked to him that his eyes looked yellow. Though he felt progressively worse he continued to work until two days before admission, 11-29-41, when he felt much worse, had cramping abdominal pain, vomited several times and took to his bed.

Physical Examination: T. 98.6. P. 62. R. 20. BP. 140/80. Revealed a well nourished and well developed colored man who appeared very weak and moderately ill. Skin was moist and elastic, mucous membranes pale. There was a marked icteric tint to the sclerae. Ears, nose, mouth and throat not remarkable. Submaxillary and inguinal nodes were palpable but not tender. Chest equal expansion. Lung fields clear throughout. Mediastinum was not widened. Cardiovascular system apparently normal. Abdomen was diffusely and moderately tender with some voluntary spasm. No abnormal masses felt. Old scar present on glans penis. Prostate not enlarged, but soft and boggy and very tender. Extremities not remarkable. Knee jerks were depressed, but present and equal, and all other reflexes were physiological.

Laboratory:

Urine: 12-1-41, Blackish red in appearance. Sp. Gr. 1.018. Acid in reaction. Albumin 4 plus. Sugar 0. Acetone 0. WBC 1 plus. RBC 0. Casts 1 plus (hyal. & gran.) Epithelium 2 plus.

Blood:	12-1	12-2	12-3	12-4	12-5	12-6
RBC (millions)	3.96	1.62	2.99	3.00	2.34	2.20
WBC (thousands)	19.10	41.35	32.00	23.00	9.00	6.50
Hb. (gms.)	8.5	5.0	5.5	4.0	4.5	4.5
Urea N.			99.	155.	224.	285.
Creatinin			8.4	14.0	16.8	21.8

12-7	12-8	12-9
1.75	2.59	2.50
6.75	9.90	6.02
3.5	4.0	5.5
530.	488.	470.
20.6	23.2	22.0

Icterus Index—Completely hemolyzed.

Course: Patient was given 500 cc. of blood on the 2nd, 4th, and 7th hospital day, without reaction. His abdominal pain became increasingly severe, he was nauseated and vomited several times. On 12 4-41 he developed urinary suppression. He did not void until the 7th, then only 630 cc. and 470 cc. on the 8th. The last 2-3 days he was delirious, gradually fading into increasingly deep coma, died at 1:10 A. M., on 12-10-41.

Dr. Wilson: (conducting)—Mr. Quisenberry, suppose you start the discussion for us.

Student Quisenberry: We have here a 45 year old colored man whose chief complaint is abdominal pain. He has jaundice and the blood chemistry studies indicate progressive urea nitrogen retention, with associated suppression of urination. Casts and albumin in the urine are indicative of kidney damage. These are the chief features in the case, and these together with the history, indicate that he must have had some noxious substance causing damage to the liver and kidneys.

Dr. Wilson: What is the nature of the damage that was inflicted on the liver and kidneys?

Student Quisenberry: These organs have a very abundant blood supply and any toxic substance in the blood will cause damage to their highly specialized cells. I think we have evidence of liver and kidney damage and also marked destruction of red blood cells. The latter may be due to a variety of causes, some of the common ones being the wrong type of transfusions, mushroom and phosphorus poisoning.

Dr. Wilson: You think then that there was some substance of unknown origin circulating in the blood?

Student Quisenberry: Yes sir, I do. It was carried by the blood stream and worked on the kidneys, red blood cells and liver.

Dr. Wilson: What do you think the man died of?

Student Quisenberry: Uremia plus liver damage.

Dr. Wilson: Mr. Tuten, how do you explain what happened to this patient?

Student Tuten: First of all I do not believe he had any appreciable liver damage. I think his death is directly attributable to some toxic element in the fish-scrap which produced a tremendous hemolysis of the red blood cells. This caused hemoglobinemia and hemoglobinuria with blockage of the kidneys by hemoglobin casts and resulted in suppression of the urinary output and finally complete anuria for about three days.

Dr. Wilson: Is hemoglobin soluble?

Student T.: I do not know.

Dr. Wilson: Well, it must have been in quite insoluble state when it blocked the tubules don't you think?

Student T.: Yes, I suppose so.

Dr. Wilson: Does any other member of the staff wish to ask a question or suggest any other hypothesis?

Dr. Kelley: I would like to ask how much hemoglobin must be present in the plasma before it appears in the urine and also why this patient was jaundiced?

Student Womble: There is apparently a definite renal threshold for excretion of hemoglobin and it has been calculated that the amount of hemoglobin in the plasma must be in excess for the amount that would be contributed by destruction of about one sixtieth of the total number of red blood cells.

The patient was jaundiced because when hemolysis is increased, the formation of bilirubin is correspondingly increased and this results in staining of the tissues if the amount of billirubin in the blood reaches a sufficiently high level.

Dr. Wilson: Mr. Waring, how do you tie up hemolysis with jaundice?

Student Waring: Bilirubin is formed from the hemoglobin that escapes from the red blood cells when they are hemolyzed. It is formed throughout the entire reticulo-endothelial system and is then carried to the liver for excretion. If there is excessive hemolysis the liver cannot handle all the bilirubin and it remains in the blood.

Dr. Wilson: This case is one of the few that we have had here and is the only fatality from this type of pathological process. Another man was sick from the same thing at about the same time, but recovered. It is a type of poisoning caused by some constituent of fish-scrap which these individuals probably inhale while unloading this material from the boats. It is a powerful hemolytic agent and produces its serious results chiefly by hemolysis of the red blood cells. Dr. Mangum has done some work on it and I'll ask him to discuss the matter. further.

Dr. Mangum: Our investigations are as yet incomplete and unconclusive but we are able to obtain a powerful hemolytic agent from the plasma of these individuals who were poisoned. This substance came down in the globulin fraction of the plasma and was precipitated out with ammonium sulphate. Its exact nature we do not yet know, but it seems to be related to arsene. We want to investigate it further when possible, but conditions along the Atlantic Seaboard do not indicate that we will have many fish-scrap boats putting in here.

Dr. Cox (Demonstrating kidneys): The kidneys are moderately enlarged weighing together 480 gms. At autopsy the cut surfaces showed diffuse widening of the cortices with obliteration of the surface markings and a peculiar variegated mottling. A conspicuous feature was the dark reddish brown striated appearance of the papillae. All these changes are still present, but rather indistinct after fixation.

This case presents a fairly simple fundamental pathologic picture which can be traced from beginning to end. The extensive hemolysis produced an excessive amount of hemoglobin in the blood which was secreted through the kidney glomeruli and concentrated in the tubules with blockage and eventual fatal uremia. Microscopically the conspicuous feature in these kidneys is the presence of large numbers of hemoglobin casts blocking the tubules, particularly the collecting ones.

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ATLANTA, GA.

Annual Meeting South Carolina Medical Association Scientific Session

Wednesday, May 20, 1942.

Meeting called to order by President George Truluck, at 9:45 A. M.

Rev. Louis C. Melcher gave the invocation.

Dr. Tom Pitts welcomed the Association to Columbia; President Truluck gave the response.

The Chair: We will now have our first paper, "General Practice in China," by Dr. V. P. Patterson, Chester, S. C.

(Dr. Patterson gave a talk on conditions and diseases as found in China and then showed slides illustrating his talk.)

The Chair: Dr. Patterson's paper is open for discussion or questions. Would any of you like to ask any questions?

Dr. McGuire: (Recognized by The Chair) I noticed in his paper a large part was taken up with external cancers. I was just going to ask him whether there was much internal cancer, for instance, cancer of the stomach or cancer of the intestines I remember sometime ago, Albert Oxner of Chicago was a firm believer of the germ theory of cancer. In the East Indies there was a predominance of external cancer because the natives didn't keep their bodies clean. They were filthy and for that reason there was a predominance of external cancer, whereas, because of their religious belief of having to cook their food (and destroy the germ) there was scarcely any internal cancer among them or of the Chinese. The Japs who were cleanly, taking baths and who kept their skins very clean, they seldom had external cancer but they did eat a lot of raw vegetables and they were therefore predisposed to internal cancer. The thought occurred whether that thought would be borne out by Dr. Patterson, whether or not there was a good deal of internal cancer among the Chinese

The Chair: Is there any further discussion?

Dr. Patterson: In regard to internal cancer. Nobody knows the incidence of internal cancer among the Chinese. They have a habit of attending to those diseases they can see and frequently a person with carcinoma of the stomach or uterus will not come to the hospital at all and will probably die at home. The diagnosis is never made because no competent physician has seen that patient to make an examination. Most of those cases that did come into the hospital were gastric cancer and uterine cancer, and it was too late to do any surgical procedure at all. I don't believe there was a week that passed during my stay out there that I didn't see at least one uterine or cervical cancer, but I don't believe, during the years that I was there we did an operation on any of these patients that I felt was done early enough to do the patient any good. I did several operations, more or less palliative or experimental to see if it would do any good. They came so late any operation was practically useless. The same thing is true of cancer of the stomach. It is said cancer of the esophagus is more frequently found in the Chinese than any race, also principally among the Chinese men. The explanation is the men are served first by the women and the rice the Chinese men eat is hotter than the rice the women eat, and that the heat of the hot rice causes the cancer of the esophagus. I don't know if that is true. I know we saw considerable cancer of the esophagus, all of which was in the advanced stage.

As far as internal cancer was concerned we were more fortunate. We had cancer of the cecum and of the colon that came in early enough for us to do an examination and to perform an operation that for a little while, a period of two or three years after the operation, were successful.

One more of our difficulties was following the cases. They have a theory if a doctor is good he will cure them with one visit, if he doesn't cure them in one visit he is no good, and therefore they do not return. It makes it very difficult. If you do a successful operation, where the patient is satisfied, they will come back and let you see if it is successful or not. On the other hand, if it is not successful, there is that much more reason why they should not come back.

The Chair: Now, our next paper "Disseminated Circumscribed Pulmonary Deposits," by Dr. W. A. Smith, Charleston, S. C. (Applause.)

Dr. William Atmar Smith: When your chairman asked me to appear before you he suggested the subject, "The Treatment of Pulmonary Tuberculosis." It seemed to me we had had so many papers on that subject I suggested I speak on "Disseminated Circumscribed Pulmonary Deposits." He wrote me back and said he thought it sounded very imposing. I wondered if he thought it might be imposing on the audience, he did not say so. (This paper will be printed later.)

The Chair: At this time the Columbia Medical Society has asked for a few minutes on our program and I will call on Major O. B. Mayer.

Major Mayer: In a time of war it is not unbecoming to turn aside from arduous tasks to honor one of our members whom we love—and whose life exemplifies its virtues and qualities of human kindness for which we are fighting. In honoring such a man we reaffirm our faith in our heritage.

The Columbia Medical Society has, by unanimous voice, decided to express its deep felt respect for one of its most distinguished members. By reserving a place on this program, the South Carolina Medical Association joins us upon this happy occasion. In the past the Columbia Medical Society has, on occasion, honored certain of its members

for outstanding achievements in science; others for devotion to their profession; others for vision in fostering organized medicine. Today we wish to add to that roll one who has not only all these claims to recognition but who in addition has won a unique place in the affections of the community as an outstanding family doctor, so faithful, conscientious and skilled in his service that no one can replace him. The confidence and devotion of several generations of mothers bears glorious witness to his achievement and a far greater recognition than anything we can do or say here. It is rather we who are honored here today, in showing honor to him we honor ourselves for the Medical Society can point with pride to his long and faithful service. He has always championed what is right, principles and strict adherence to ethics. When any problems arose calling for the establishment of a precedent, it was to him we turned for counsel. When we needed guidance from the past, it was his rich experience that served us. He has a conspicuous record of a faithful attendance to the meetings of this Society. For the younger members of our profession, he is a conspicuous exemplar of the great tradition of a family practitioner, who has endeared himself to patients and to brother doctors. Dr. James Higgins McIntosh was born in Newberry. He attended the local Academy and Newberry College, graduating at the age of 17 with an A.B. degree. He was graduated from the College of Physicians and Surgeons in New York City in 1888 with a degree of Doctor in Medicine. He then accepted a position on the Staff of Belleview Hospital for two years. The last year he was associated with the Society for the lying in. It was largely through his efforts that the original Broome Street Dispensary became a success and a permanent lying in institution. He then returned to Newberry to practice medicine. In 1900 he moved to Columbia and entered practice here. He soon became a leading member of the medical profession and endeared himself to many.

Among the many honors that have been bestowed upon him may be mentioned Chief of Staff of the Baptist Hospital. He has been President of the Columbia Medical Society, Seventh District Medical Association of South Carolina, the South Carolina State Medical Association, the Tri-State Association and the Association of Surgeons of the Atlantic Coast Line Railway. During the world war he rendered his country invaluable service on the local draft board for eighteen months. He has now been actively engaged in the practice of medicine fifty-four years. Of this, forty-two years have been spent in Columbia.

Sir: We make this presentation with both humility and pride. We feel humble in the face of your years of service. We are proud in this gathering to point to the achievement of a distinguished brother member of the Society.

We have for a long time wished to express to you our admiration for you and our appreciation of your service in the alleviation of human suffering. You have been an inspiration to us. With the love and respect of this Society, in which we are joined by your patients and friends throughout the State, I present this pitcher. The inscription:

In appreciation of a long life spent unselfishly in the service of humanity and as an expression of our friendship and esteem, this token is presented to Dr. James H. McIntosh by his medical colleagues of Columbia. May 20, 1942.

Please accept it as only a small token of our feeling for you. May you long have the health and happiness which you now enjoy as just fruits of a long and successful career.

Major Mayer: I will ask Dr. Bunch and Dr. Adcock to escort Dr. McIntosh to the rostrum. (Dr. McIntosh is brought up and the entire assembly rose in his honor.) Sir, we are humble in the face of your long years of service and we are proud for the accomplishments and achievement you have attained in this community and for the service you have rendered in the alleviation of pain to mankind. We have long felt we wished to express to you our admiration for your achievements and now with the love of this society I present to you this pitcher and these goblets. The inscription on the pitcher reads: "In appreciation of the long life spent unselfishly in the service of humanity and as an expression of our friendship and esteem this token is presented to Dr. James H. McIntosh by his medical colleagues of Columbia. May 20, 1942." Please accept it as a small token of our feeling for you. May you have long years of health and happiness which you so much deserve for the successful career which you have spent. (Applause.)

Dr. McIntosh: My 42 years with the Columbia Medical Society have been a constant pleasure. I can look back to many recollections of various happenings but this occasion this morning comes in the nature entirely of a surprise to me and I do appreciate it most thoroughly. I thank one and all of you for giving me so many happy moments. I thank you. (Applause.)

The Chair: I know each of us are proud to see the Columbia Medical Society honor an ex-president of the South Carolina Medical Association. Dr. McIntosh is an example of a great many doctors in this state, he has had a life of useful service in medicine to mankind. He has received recognition from his home society and the State Association. I wish to congratulate him. I only wish we could in some way recognize the service of a great many more men over our state that likewise serve not only the profession but mankind. These are rewards richly deserved by a great many but few receive them.

We will pass on to the next item which is a subject many of the younger fellows are deeply interested in, it is the "Procurement and Assign-

ment Service," and I would like to ask Dr. Buck Pressley to come forward and take charge. (Applause.)

Dr. Pressley: I am not going into a lengthy discussion of Procurement and Assignment. I am sure every man, every doctor in the audience knows as much of the working principles of Procurement and Assignment as I do. The thing that is most vital to the South Carolina Medical Association is how Procurement and Assignment is working out in our own state.

Early in February I was asked by Mr. Paul V. McNutt to serve as a chairman of the Procurement and Assignment service in South Carolina. I am quite sure the reason he asked me to render this service is the fact that last year and two years ago I served as Chairman of the Preparedness Committee. All of you will remember the preparedness drive put on a couple of years ago, which was instituted, in view of the trouble that we experienced in the World War I. Communities were deprived of medical help, there was no unification of entrance into the army and after entering the army the men were unable to be placed where they would be of most use. When we entered the war after December 8th, Dr. Frank Lahey, and those gentlemen who constitute the official Board of Procurement and Assignment, met and organized the Procurement and Assignment Service for the Medical profession. Now, this is a service, this is our own service, the Procurement and Assignment Service. Leaders thought that the medical profession could be best served by having the doctors placed where they were most useful, and above all things seeing that the service line proper was well protected, that no community would be deprived of medical service.

I want to take this occasion to express our thanks to Col. Sam F. Seely, who is executive officer of the Procurement and Assignment in Washington. Col. Seely had a tremendous job. This thing was instituted, as it were, on the spur of the moment, and he was given insufficient clerical aid. Office space was at such a premium in Washington he was located down on Pennsylvania Ave., up above a restaurant. The first trip I made to find him I took a taxi and told the driver I wanted to go to 601 Pennsylvania Ave. The taxi drove me up and stopped in front of the restaurant and said, "Here you are." I said, "This isn't right," and he said, "Yes, it is." They had him up there in two rooms and the amount of mail he was receiving daily would actually fill all space alloted him. He worked out of it. Now his address is 905 East Street, with more space and more help. The job he undertook for the medical profession was terrific. Everybody wanted to know what their duty was in the emergency and he worked out of it as far as he possibly could and I think has done a wonderful job of it. He is absolutely approachable and he will do exactly what the organization is set up for.

Then I want to express my gratitude to the members of the Committee in South Carolina, who have served with me in this work. The Council has given wonderful aid. It has responded to every call and has made it possible to work out the details of this organization. Now I feel, after four or five months work with it, that Procurement and Assignment is possible. I think it is the only means by which the medical profession can be best served. I am sure we have made mistakes, I am absolutely sure that these mistakes were not intentional but in the emergency we could not prevent them. On April 24th we had approximately 14,000 medical men in the army, as best as could be figured from the Surgeon General's Office. At the end of this year we are going to need 28,000 to 29,000 medical officers. The Army is faced with the necessity, or it places with us the responsibility of getting some 16,000 extra medical officers in the next 7 or 8 months. The central committee, of whom Dr. Frank Lahey is Chairman, called a meeting of all State Chairmen to Washington on April 24th. I am sure every member here has read the excellent report published by our Secretary, Dr. Julian Price. He attended this meeting with me and has written it up in fine detail. We have it here but we will not read it because I am sure every member here has read it and knows what it is all about. Every state was assigned a recruiting team, an army recruiting team. This team is to work in connection with the Procurement and Assignment service in this state. We are very fortunate indeed to have a man assigned to us, a native North Carolinian, who was in general practice and has been in the army for probably 18 or 20 months. He came in with the National Guards and we find he is certainly most helpful.

The State Chairmen of the Procurement and Assignment were asked to go home and call their committees together. Our Committee in South Carolina consists of the Council, the President, the President-elect and where it is necessary the officers of an individual county society. We were asked to do this,—to prepare a list of doctors whom we considered available for military service. Two weeks ago we met in Columbia and each councilor after conferring with the officers of the counties in his district brought in a list of doctors. Of necessity these doctors were in the low bracket according to age. It was emphasized and reemphasized in Washington that doctors up to 36 were desired more, than the ones between 37 and 45. In a very, very few instances will a man after 45 be inducted into the service unless he is qualified by a Specialty Board or is qualified to take over some specific job. Since the institution of this recruiting board we have placed two or three men above 45 to take over specific jobs in some hospital. After 55, all the information I can get from the Surgeon General's office is there will be very, very few after 55 years of age inducted into service.

I know you will want to know what South Carolina has done in the way of furnishing medical officers. I want to say this for the doctors of South Carolina; I have always felt this way and I still continue to feel it as I associate with them more and more, that the cross-section of the medical profession of our State represents the best there is in American manhood. In very rare instances, I think I could say practically none, has a man been approached that was not thoroughly patriotic, willing to do his duty in every respect, and while I realize deeply the responsibility of the job that I have at the same time I feel like the friendships that I have been able to establish among the doctors, in discussing their problems, has been worthwhile to me. It has brought home to me, more than ever, the loyalty of the medical profession.

As far as I am able to determine at this time, this board brought in the names of 124 doctors to be submitted to the recruiting board for talking over their problems, for commissioning and for entering into the service. If 75% of these doctors qualify for the Medical Service with the number of doctors that we now have in the army our percentage will run somewhere in the neighborhood of 25 to 27% of the doctors of the state, in active practice. We have, at the last census, 1401 doctors in the state, and that included retired men, men who have gone into other work, and was not the actual number of active doctors in the state. We had 1061 active doctors, that might vary 5 or 10 either way, but that is approximately the number that we had. On the basis of the number that we figure will be able to pass the physical examination, the number entering the armed services of our country will be 283 doctors. You can figure the percentage for yourself. You ask yourselves and you will ask me what is our quota, what are the other states doing? I am sorry I can't tell you. I don't know the proportions of the other states. In talking to doctors in Washington and those from the other states, I think our percentage is high. I wish I could tell you but after all that is neither here nor there. I was just thinking this morning of the friends I have in Australia, and these boys who went from South Carolina to Tokyo, and these doctors in Australia, today doing their bit. Whether we furnish more or less than the other states, and I am sure we are right at the top, our responsibility is not lessened one way or the other regardless of the percentage. Of course, we believe the City of New York could furnish 2500 doctors and be better off because there is a doctor on most every window in New York City.

The Procurement and Assignment up to this morning has cleared 83 doctors as being available for military service. I suppose it is not necessary to go into detail as to how this is done but here is just roughly how it is done. A man has applied or states his intention of going into the service. From the Procurement and Assignment service in Washington his name is entered on a blank. This is sent to Chicago—four copies are sent to Chicago, where his rating as a specialist is determined. This blank comes to me and on it are two squares "available at present" or "essential." A cross mark says he is "available" or a cross mark says he is "essential" in his present location. We have cleared to the present 83 doctors. Those that have cleared as being "essential" in their present capacity, is 28. These were mostly young men. In a few instances, and I want you to bear this in mind (I feel this is awfully important) in a few instances a man has been declared "essential in his present location" but his patriotic duties or his feeling in his inner soul got so strong that he jumped the traces and went. I might say to Ben Wyman "Ben you can not go," but in the last analysis Ben has the last say so. If you are cleared as being "essential" or "available" you have the last say so, and it should be that way. We are still free Americans. But most physicians are following our suggestions.

Here is the last thing that I have from Washington, yesterday. It says on attached form (67), "we shall transmit to you the names and addresses of the physicians who have been cleared by you and the Chicago office. This information will be referred to the Army Rercruiting Board in your State. We will prepare and forward four copies of this Form to you in each case. Forward one to the Medical Recruiting Board, one copy to this office, retain one copy for your files." This sentence is most important, "In the event this man refuses to be commissioned forward the remaining copy to the State Director of Selective Service." You can take that to mean what you want to. I suppose if a man is cleared as available, can be spared to his community, but refuses to accept a commission, he falls into the hands of his Local Draft Board.

The Selective Service Boards want every doctor to be placed where he can serve best. They don't want a doctor to be recruited, inducted into the army as a private, and the Boards of South Carolina have been very nice about it. As soon as they were assured that this man has signed a Procurement and Assignment blank or made application for a commission, he is immediately transferred to a deferred classification and is left alone. But, it seems to me from this letter that if the men who are available to go feel that they must not go, their names will be turned over to their Local Board or to Col. Springs office, to be disposed of.

I want at this time to introduce to you the man who is at the head of the Recruiting Board for South Carolina, Lt. Col. W. C. Goley. Stand up, please, Col. Goley. (Applause.) and Maj. Philips, who is Line Officer from the Adjutant General's Office, who will fix up your papers, commission you, give you the oath of Office. Major Philips (Major Philips stands) (applause.)

I want also to introduce a man who has been very

helpful to us in every way, the Commanding Medical Officer at Fort Jackson, our friend, Col. Scott. (Applause.) Do you have anything to say Col. Scott?

Col. Scott: I would like to express our appreciation of Dr. Pressley's work and of the work of the Council in getting this thing under way. Most of you received from me, not so long ago, a red bordered letter when we were making a very urgent appeal to get doctors. The time element was short and we needed to get as many doctors as we could in the shortest possible time. Dr. Pressley has responded and been extremely helpful and as he told you all of these cases are referred to his committee in order to assure adequate medical attention in the communities in South Carolina. I thank you very much. (Applause.)

During the day and tomorrow Col. Goley and Major Philips will be in Room 409. They will be glad to talk with anybody about the army problem and if you will drop in there anytime they will be glad to talk with you. I will ask Col. Goley if he has a word to say, if so we would be glad to hear from him.

Col. Goley: Thank you, I don't have a speech to make except that we want to help every doctor who is on this list to get a commission, if we can give him one, and we are here to give any service that we can and it is our hope that we can contact each man on the list and offer him a commission. All that we can do is to offer it to him and if there is any doctor here that is on this list that would like to have a physical examination while he is here come to Room 409 and we will arrange that for you so that you can be examined and know whether or not you can pass the physical requirements and we certainly want to cooperate in every way we possibly can. Thank you. (Applause.)

Dr. Pressley: Major Philips, from the Adjutant General's office, is most helpful to the doctors in every way in their paper work and in advising them. We would be glad to have a word from him, Major Philips.

Major Philips: There is a lot that can be said about this recruiting of medical officers and a lot of questions probably that you would like to ask and the best way to do, if you don't get a chance to ask today, is to write your questions in. The proper address is Medical Department, Officer Recruiting Board, Station Hospital, Fort Jackson, S. C. Our territory is South Carolina and by the way I am a South Carolinian myself. Some seemed to think we were asking too much of South Carolina doctors but as a South Carolinian I have never tried to get out of any of this military business and I don't mind asking South Carolinians to do a little more than their share.

Col. Scott: I extend an invitation to you to visit our hospital. We have quite a large institution and you will be surprised with the type of equipment and facilities we have to take care of the sick and the organization that exists there. We would be very glad to see you singly or in groups.

The Chair: We deeply appreciate these army men coming and explaining this to our doctors. I think it is a thing uppermost in the minds of a great many doctors in this State and it is also a vital subject to those who are to be left behind. I hope we understand it better and if not they have told you where you can get further information.

I would like to extend to the doctors the privilege of the floor of this meeting. We would be glad to have you come meet with us. I understand Col. Grant is in the room and I will ask Dr. Weston to present him.

Dr. Weston: It gives me great pleasure to introduce an old friend of ours, Col. David N. W. Grant, head of the Medical Corps, U. S. Army Air Forces, who will speak this evening. Col. Grant. (Applause.)

Col. Grant: Gentlemen, I didn't intend to say anything this morning, particularly in connection with recruiting. I know the army is very short of medical officers and I am going to say very little except to supplement what has already been said. The Air Force is just as short as the army. The Air Force happen to be on a separate allotment and I just mention there is an opportunity of getting into the Air Force. Figures were mentioned which did not include the Air Force. We have five hospitals as large as Walter Reed or larger. The largest being 1850 beds. We had 2700 doctors and my procurement is a little under 10,000 as of December, 1942. You no doubt have seen in the Journal of the A. M. A. where the Air Force went on their own procurement. Since that time we have contacted over 4000 doctors. We are getting them now at the rate of 40 and 50 a day, commissions actually being issued as fast as they could be processed. I am just adding this, not that I am putting on a recruiting campaign. I know these gentlemen are up against it, they are trying to get officers for the army, as a whole, and I want to remind you there is such a thing as an Air Force, and we would be very glad to hear from you. (Applause.)

Col. Goley: I want to apologize for not mentioning the fact that for any doctor that comes to us who wants to go in the Air Force we stamp his paper "Air Corps" and send it on through. We have been doing that and we want doctors whether it is for the Air Corps or the Army, any of them.

(Dr. Price takes Chair.) At this time it gives me pleasure to present to you the President of our Association for his Inaugural Address, Dr. George Truluck.

(Dr. Truluck delivered his address, printed in The Journal May, 1942.)

Wednesday P. M. 2:30

The Chair: The meeting will come to order. We will turn back to the business not finished this morning. We will hear from the Memorial Com-

mittee of which Dr. Brabham is Chairman.

(Names of deceased physicians and tribute by Rev. F. B. Estes printed in last issue of the Journal.)

The Chair: This concludes our Memorial Exercises. We will now continue with our regular program. First taking up where we left off—our first speaker is our Guest Speaker from the South Carolina Pharmaceutical Association, Dr. Joseph B. Hyde.

Dr. Jos. B. Hyde: Mr. President, members of the Medical Society of South Carolina, I am very much honored by being the only practicing pharamacist in such a large group of physicians. And I am usually able to hold my own in serving one physician at the time but never in such an overwhelming majority. I am fully aware of the privilege and the pleasure which was given me in my selection as the Exchange Speaker from the South Carolina Pharmaceutical Association to the Medical Society of South Carolina. I presume, since I have been a member of my own association 42 years, that this is the reward for my services. During these years I have had the friendship and companionship of many physicians, some of whom I have seen rise to success and usefulness and then pass away. From these friendships I have gathered much excellent advice and much wholesome knowledge. The first lesson which I learned from a physician was many years ago, and that lesson was from the well-beloved Charles M. Reese, physician and surgeon. One evening I was asked to accompany Dr. Reese, and another young man came in and said, "Good evening, Doc." Some of us remember the dignity and the reserve of Dr. Reese and I was not surprised to here him say, "Only darn fools and little children call physicians 'Doc.'" That was a lesson which I learned very early in life. It is no title whatsoever. The use of the word "Doc" for "Doctor" even as a sign and token of affection is rather distasteful.

The other afternoon there were several of us standing in front of my store watching three big powerful United States Army bombers flying low, the most marvelous sight and most inspiring. As we watched them we were joined by a little lady. As they flew in regular formation, two in front and one behind, kind of triangular, this little old lady said to me, "Do you know why they fly that way?" I said, "No, why?" "Because," she said, "If one starts to fall the other will catch him." I am sure Col. Grant will have another reason to give for that. But even at that the old lady spoke of the cooperation and coordination, which is most applicable to any phase of life today. So, I speak to you very briefly upon the subject of emergency cooperation.

There are many problems which your association and mine may have to solve together. This growing scarcity of certain types of drugs, important everyday drugs, such as belladonna, digitalis, and menthol, and camphor and the growing demand in hospitals, especially in government hospitals for phenol, alcohol, acetone and many others. We were told a year ago that we had three years supply of quinine in this country and three years supply of opium but that was before the fall of Java and we have been informed, by recent order of the government, quinine is to be used only as an antimalarial and opium and its derivatives can only be stocked in a very normal everyday way. And yet these orders and these dictates are necessary that we should work together and cooperate in the all out effort to win this war. Of course, perhaps it would have been worse in the days I spoke about a few minutes ago when pharamacists had some three score tinctures and some three score fluid extracts and a stock of crude drugs. I have seen many changes in materia medica and therapeutics.

Then there is another problem which probably worries us more than it worries you and that is the problem of transportation. The governments' armed force and their supplies must come first, we know and acknowledge that. Orders are being delayed and we are waiting longer to receive fresh supplies and the manufacturers are behind in their shipping, due to the small forces with which they operate and transportation lines themselves are much slower than they were a short time ago. All of this, of course, is a problem, a growing problem to a man who is practicing your profession or mine but as yet we have not reached any great sacrifice. We are not doing without now. We are living very much the life that we lived before, although I am sure we are prepared, all of us, to have greater sacrifices. Then, there is a problem which is uppermost in your mind today, and that is the problem of how are you going to spread your services to those who remain behind and have to have medical attention with the constant and growing demand for physicians in the armed forces. The problem is a problem that will be acute. You probably more than anyone else will have to spread more, you will have to work harder. I don't think any other profession is going to be effected so much as you are. This is a stupendous war. Men talk and write of millions of soldiers, they talk about tanks and armaments by the thousands and tens of thousands, and they speak about professional men by the tens of thousands. It is a stupendous effort and an effort to which we shall realize more and more, thank God we are Americans.

Now, of course, that shortage which applies to the medical profession also applies to the pharmaceutical profession. The army I think it is, wants 5,000 men in the pharmaceutical service. Five thousand men. We as a pharmaceutical association and as teachers of pharmacy have a big job to perform, and it is going to mean that in our own state the conditions will prevail as in the mid-west today. Some of those drug stores are closed, signs on the doors "closed for duration of the war." Other drug stores and many of them will be con-

ducted by the proprietor himself, without any efficient help. Anyone who has even for a short time conducted a drug store, working 12 to 18 hours a day in that drug store, all by himself, needs the sympathy of the public. But in any cooperation whatsoever and with any object which has for its purpose patriotism, service to country, and service to humanity, I pledge you the sincere and the earnest cooperation of the South Carolina Pharmaceutical Association. (Applause.)

The Chair: I am sure I voice the sentiments of each and everyone that we deeply appreciate having Dr. Hyde with us representing the South Carolina Pharmaceutical Association.

We shall go on now with the program. The next paper is "Problems of a Pre-Natal Clinic," by Drs. D. S. Pope and W. A. Hart of Columbia, S. C. (Paper read by Dr. D. S. Pope.)

The Chair: We will hear from Dr. W. R. Mead of Florence on the subject of Backache. (Dr. Mead's paper will be found in this issue of the Journal.)

The Chair: We will now present a new feature, The Question Box, under the able management of Dr. N. B. Heyward.

(The Question Box is printed in full elsewhere in this Journal.)

Thursday A. M.

The Thursday morning session was presided over by Dr. T. A. Pitts, newly inaugurated President. Papers were presented by Drs. D. S. Pope and W. A. Hart, and by Dr. Hines Roberts of Atlanta. (These papers will be published in the Journal.)

Major General Lewis B. Hershey also made an address which was published in the June issue of the Journal.

This concluded the official program of the Association and adjournment followed. Following this the South Carolina Fracture Committee presented a short program for its members and friends.

BOOK REVIEWS

MANUAL OF STANDARD PRACTICE OF PLASTIC AND MAXILLOFACIAL SURGERY

W. B. Saunders Co.

Here, within the confines of a single volume, appears the best which there is at the present time in the field of plastic and maxillofacial surgery.

This volume is one of a series developed under the auspices of the Division of Medical Sciences of the National Research Council to furnish the medical departments of the United States Army and Navy with compact presentations of necessary information in the field of military surgery. The Subcommittee on Plastic and Maxillofacial Surgery, which edited this book, is composed of Drs. Robert H. Ivy, Chm., John Staige Davis, Joseph D. Eby, P. C. Lowery, Ferris Smith, Brig. Gen. Leigh C. Fairbank, Medical Corps, Lt. Col. Roy A. Stout, Dental Corps, U. S. Army.

Although this book is prepared primarily for the military surgeon, it should also prove a highly valuable source of professional information for any surgeon desiring knowledge concerning plastic and maxillofacial surgery. Concisely written, beautifully illustrated, studded with epigrammatic statements which should stick in one memory, it is a book which any surgeon should cherish.

PHYSICIANS' REFERENCE BOOK OF EMERGENCY MEDICAL SERVICE

Published by E. R. Squibb and Sons, New York

E. R. Equibbs and Sons has made a real contribution to medical literature and to the medical profession in the preparation and presentation of this volume.

The book is a compilation, chiefly from British literature although there are some articles by American writers, of articles dealing with the practical experience and lessons acquired in handling civilian war casualties. It is our fervent hope that the average American physician will not need to deal with the types of injuries discussed in this book, but if he does—a reading of this book will stand him in good stead.

The book is divided into three sections; Precautionary Measures, Hospital Services, Management of Casualties. In the last section are chapters dealing with; Shock. Burns, Wounds and Fractures, Wound Infection, Blast Injuries, Crush Injuries, War Gas Injuries.

If an ounce of prevention is still worth a pound of cure, it would behoove every physician to acquaint himself with what is new in the field of treating war casualties—and a book such as this will help him to do just that.

HEALTH EDUCATION OF THE PUBLIC

W. W. Bauer and Thomas G. Hull
W. B. Saunders Co., $2.75

The title of this book does not give a true idea as to its contents. It is not just another monograph on the general subject of health education but is, as the authors point out in the introduction, "a book designed for use as a practical handbook in health education by physicians who are chairman of committees on public relations or on health edu-

cation for state and county medical societies; by health educators, medical and nonmedical, in state, city and county health departments; and for those students of public health who wish to make health education a part of their training, as well as for the public health nurse who is primarily a health educator."

Upon the thesis that health education is not only desirable but that "whatever individuals may think about the desirability of health education, we face a condition, not a theory. The public is eager for information about health. Quacks, fadists, racketeers, cranks, and those with something to sell are feeding this appetite. Unless there are enlightening forces, the public will be seriously misled, to its own detriment," the authors take up the various methods of health education and in concrete and interesting style show the best form in which a program can be put into action.

A chapter is devoted to each of the following: the radio, the exhibit, the meeting, pamphlets, the newspaper, the motion picture, stereopticon slides, the magazine article, correspondence, and books.

Speaking of radio talks (and numbers of physicians have been called upon and will be called upon for short health talks) the authors tersely suggest, "First tell them what you are going to talk about; then talk about it and then tell them what you have just been talking about. . . . . Every radio talk should have three constituents—a smile, a tear, and an idea." They also give many ideas with regard to the method of presentation, the length or the talk, etc.

In the chapter devoted to meetings, and this chapter will be of particular interest to the "speaking" physicians, there is presented a list of subjects which have been found especially acceptable over the country. They also present concrete suggestions as to the organization or the meeting itself, the publicity necessary, and the obligations of the speaker and of the audience.

Health Officers and nurses will find much in the chapter on the exhibit, which includes the use of posters and charts, which they can utilize in their every day work.

All in all, this is an excellent handbook which should be at the elbow of every physician and nurse who is playing his or her part in the great program of educating the public in matters of health.

BLOOD GROUPING TECHNIC

A Manual for Clinicians, Serologists, Anthropologists, and Students of Legal and Military Medicine

By

Fritz Schiff, M.D., and Wm. C. Boyd, Ph.D.

with foreword by

Karl Landsteiner

1942, Interscience Publishers, Inc., New York, N. Y.

This book brings up to date a clear understanding of the principles of methods of blood grouping and accurate information in regard to sub-group and the Rh factor, which is of great value to all physicians. There is also a carefully arranged description of the technical methods used for the classification of blood group and the determination of suitable donors for the giving of blood.

Special application of the principles of blood grouping is fully described, transfusion accidents, prob'ems in relationship and paternity and the forensic application of blood groups. Methods for obtaining and storing of blood plasma are well described. An admirable system of cross references is given which enables the reader to easily find what he particularly desires to refer to.

The title Blood Grouping Technic does not fully cover the value of the book for principles and discussion is comprehensively given to make it of value to those to whom the technical procedures are of only passing interest.

It is unfortunate that Dr. Schiff did not live to see the completion by Dr. Boyd of the translation and additions so ably presented.

F. B. Johnson, M.D.

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SOUTH CAROLINIANA

J. I. WARING, M.D., CHARLESTON, S. C.

The pens of the profession have been moderately busy in recent months and the products cover a wide field. On the surgical side, Dr. F. E. Kredel of Charleston has contributed two articles, one of which deals with a method of utilizing collateral cerebral circulation by means of muscle graft in an effort to benefit damaged areas of the brain.[1] He describes technique and results in a small number of cases, one of which was cerebral thrombosis. The temporal muscle is grafted to a denuded portion of the cortex. Some of the illustrations are by the author. Dr. Kredel has also written on the surgical treatment of cardiospasm by means of a pyloroplastic type of operation via the abdominal approach.[2] He reports one case in an eighteen year old boy.

Likewise in the surgical line is an article by Dr. C. W. Evatt, Charleston, on the results from tonsillectomy.[3] In the newspaper world the old saw runs that when a dog bites a man, that's no news, but when a man bites a dog, that's news. When a throat surgeon writes conservatively about the limitations of tonsillectomy, that's good news for many an innocent whose tonsils are about to come in range of the snare. If Dr. Evatt's sane advice is followed, there will be a healthy decrease in tonsillectomies in the coming years. The discussion of this paper is interesting and those who feel dubious about the question would do well to read some of the articles by Dr. A. D. Kaiser.

Dr. G. T. Tyler, Jr., of Greenville has presented an appraisal of vaginal hysterectomy and feels that the operation has a very proper place.[4]

On the medical side there is to be found an excellent article on cystic disease of the lung by our president-elect, Dr. Wm. Atmar Smith, of Charleston.[5] The etiology is discussed, the rather baffling clinical signs are considered, and 5 cases are reported. The article is well illustrated. Two articles on heart disease have appeared recently. Dr. T. R. Littlejohn of Sumter has covered the conditions which are often confused with true heart failure, such as gallstones, pneumonia, hysteria, and arthritis of the spine, and has given pertinent illustrative cases.[6] Dr. Hugh Smith of Greenville has reported and discussed two unusual cases of congenital heart disease.[7] Drs. R. M. Pollitzer, John Simmons, and I. Yasser have given a detailed report and discussion of a rather rare condition of miliary tuberculosis with tuberculides, and have stressed the importance of X-ray and tuberculin tests in finding unsuspected tuberculous infection.[8] Another contribution from Greenville is by Dr. I. S. Barksdale, G. K. Mullenix, R. N. and L. B. Fuster, R. N. who discuss the difficulties of control of contacts of patients with diphtheria and scarlet fever.[9] They feel that hospitalization is desirable for carriers until treatment by local use of bismuth violet solution or by tonsillectomy can render the carrier free of the organisms in question. The discussion by Dr. Russell Cecil in regard to streptococcic infection is interesting. He feels that sulfadiazine is useful in preventing complications in "colds."

Dr. K. M. Lynch of Charleston has published a clinical and pathological report on silicosis, pointing out that there appears to be a systemic distribution of silica as well as the better known pulmonary collection.[10]

Anatomical studies on the pyramidal tract by Dr. A. M. Lassek, Charleston, are to be found in three different journals, and are a part of the research which Dr. Lassek has been pursuing for some time.[11, 12, 13]

Dr. R. B. Taft, of Charleston has contributed an article on radium recovery by means of the Geiger-Muller counter.[14] And has another report on the amount of radiation received by airplane pilots from their instruments, which appear to be harmless.[15]

Dr. G. McF. Mood and E. H. Fowler, Charleston, have written a report on a method of typing pneumococci which allows more leisurely work.[16]

A plea for more consideration of the premedical group, by A. M. Lassek is timely when the procurement of a new crop of medical students is to be considered a serious question.[17] He suggests that the premedical man be recognized early as serving an apprenticeship, and that the change of pace from academic to medical school be made less painful.

1. Kredel, F. E.: Collateral cerebral circulation by muscle graft. Southern Surgeon, 11:235, April, 1942.

2. Kredel, F. E.: Surgical treatment of cardiospasm. South. Med. & Surg. 104:258, May, 1942.

3. Evatt, C. W.: What removal of the tonsils will and will not do. South. Med. & Surg. 104:249, May, 1942.

4. Tyler, G. T., Jr.: Vaginal hysterectomy in uterine prolapse. South. Med. & Surg. 104:203, April, 1942.

5. Smith, W. A.: Cystic disease of the lung. A problem in differential diagnosis. International Clinics 1:144, March, 1942.

6. Littlejohn, T. R.: Some conditions simulating cardiac emergencies. South. Med. & Surg. 104:260, May, 1942.

7. Smith, Hugh: Heart disease clinic. South. Med. & Surg. 104:328, June, 1942.

8. Pollitzer, R. M., J. Simmons, and I. Yasser: Generalized miliary tuberculosis with tuberculides. Report of a case. Arch. Ped. 59:218, April, 1942.

9. Barksdale, I. S., G. K. Mullenix, and L. B. Fuster: The prevention of diphtheria and scarlet fever in contacts. South. Med. & Surg. 104:192, April, 1942.

10. Lynch, K. M.: Silicosis of systemic distribution. Amer. Jour. Path. 18:313, March, 1942.

11. Lassek, A. M.: The human pyramidal tract. IV A study of the mature myelinated fibers of the pyramid. Jour. Comp. Neur. 76:217, April 15, 1942.

12. Lassek, A. M.: The human pyramidal tract. V Postnatal changes in the axons of the pyramids. Arch. Neur. & Psych. 47:422, March, 1942.

13. Lassek, A. M.: The pyramidal tract. The effect of pre- and postcentral cortical lesions on the fiber components of the pyramids in monkey. Jour. Nerv. & Mental Dis. 95:721, June, 1942.

14. Taft, R. B.: A portable Geiger-Muller counter. Radiology 38:350, March, 1942.

15. Taft, R. B.: Gamma radiation from airplane instruments. Amer. Jour. Roent. & Radium Therapy 47:467, March, 1942.

16. Mood, G. McF. and E. H. Fowler: A satisfactory technique for delayed typing of the pneumococcus. Jour. Lab. & Clin. Med. 27:805, March, 1942.

17. Lassek, A. M.: The neglected "premedics." Jour. Assn. Am. Med. Coll. 17:175, May, 1942.

DEATHS

Dr. E. Clay Doyle, 68, prominent Oconee County physician, died July 10, at his home in Seneca. He received his education at Presbyterian College, Clinton, the University of Virginia and Bellevue College, New York, where he received his medical degree in 1897. After his graduation he returned to Seneca to practice medicine and to become a leader in his community. Dr. Doyle is survived by his wife, Mrs. Mary Cherry Doyle, and a brother, Dr. Will R. Doyle, also of Seneca.

Dr. W. A. Whitlock, Jr., 42, practicing physician of Laurens, died at a Columbia hospital July 18, after an illness of ten days. After graduating from Furman University, Greenville, and the Medical College of the State of South Carolina, Charleston, Dr. Whitlock opened offices in Aiken, S. C., where he practiced until May, 1941, when he moved to Laurens. Dr. Whitlock is survived by his wife, Mrs. Pliney Timmerman Whitlock, his parents, Dr. and Mrs. W. A. Whitlock, Sr., of the Kitchings Mill section, and two sisters.

Relatives have been notified of the death of Dr. Allan John Jervey, Jr., of Tryon, N. C., and Charleston, S. C., from wounds received at the battle of Midway.

Dr. James Henley Mills, 61, of Mayesville, died suddenly on July 17. Born in 1881, Dr. Mills received his medical training at the Medical College of the state of South Carolina, graduating from that institution in 1907. He is survived by his widow, Mrs. Mary Brunson Mills, two daughters and two sons.

Dr. Robert M. Graham, 55, of the Navy Yard section, died at Roper Hospital, Charleston, on July 20. A native of Lake City, Dr. Graham graduated at the Medical College of the State of South Carolina in 1913. Surviving are two daughters, two sisters and three brothers. Dr. Graham was a veteran of the World War.

NEWS ITEMS

Announcement has been made of the marriage of Dr. Edith Eskrigge of Columbia, to C. Wycliffe Haynes also of Columbia, on July 8, in Highlands, N. C.

Three more Charleston physicians have reported for duty in the armed forces. They are Dr. Henry C. Robertson, Jr., Dr. William J. Ball, and Dr. Robert J. Baker.

The South Carolina Medical College began its extra session on June 25th. The new freshman class has fifty members.

Dr. Bothwell Graham, Third, of Clinton, has left for Parris Island where he is assigned to the staff of the naval hospital as a lieutenant.

Major Charles H. Fair, formerly of Greenville, has been promoted to the rank of Lieutenant-Colonel in the U. S. Medical Corps.

Dr. A. J. Buist, Jr., of Charleston, who has been on sea duty with the fleet in the Pacific for six months, has returned home and will report for duty at the Charleston Navy Yard.

Dr. William Weston, Jr., of Columbia, was elected President of the Second District Medical Association at a joint meeting of that organization with the Columbia Medical Society at Hotel Columbia on July 13. Other officers elected were Dr. R. B. Dunnovant of Edgefield, Vice President, and Dr. D. S. Asbill of Columbia, Secretary-Treasurer.

News has been received of the marriage of Dr. Philip Assey of Georgetown.

Dr. O. M. Goodlett, Jr., Pelzer, S. C., was also married recently.

Dr. and Mrs. E. W. Masters, Columbia, are being congratulated on the arrival of a baby girl, June 19, 1942.

At the June meeting of the Spartanburg County Medical Society Dr. John Elliott of Salisbury, N. C., talked to the members about blood plasma.

Dr. R. Murdock Walker of Sumter has reported for duty with the armed forces.

Three physicians from Bennettsville have left recently to serve in the Army of the United States. They are Drs. P. M. Kinney, William Evans and L. Paul Barnes.

Dr. David R. Stack, Jr. of Charleston is now stationed at Camp Pickett, Virginia.

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HONOR ROLL
(Continued)

Dr. C. J. Scurry, Greenwood
Dr. Hazel B. King, Lake City
Dr. George E. Thompson, Spartanburg
Dr. C. C. Ariail, Greenville
Dr. Leon D. Wells, Holly Hill
Dr. W. K. Fishburne, Moncks Corner
Dr. H. B. Morgan, Ware Shoals
Dr. J. A. Hayne, Jr., Hampton
Dr. G. P. Richards, Charleston
Dr. Jack D. Parker, Greenville
Dr. A. H. Niell, Clover
Dr. W. R. Wallace, Chester
Dr. A. W. Lowman, Denmark
Dr. A. S. Blanchard, Williston
Dr. R. E. Poole, Spartanburg
Dr. S. J. Morrow, Inman
Dr. W. G. Morehouse, Spartanburg
Dr. C. W. Bailey, Spartanburg
Dr. O. Z. Culler, Orangeburg
Dr. J. W. Carroll, Russellville
Dr. John T. Howell, Florence
Dr. James T. Quattlebaum, Columbia
Dr. John Townsend, Charleston
Dr. W. P. Turner, Greenwood
Dr. P. K. Switzer, Union
Dr. J. B. Edwards, Swansea
Dr. J. M. Symmes, Greenwood
Dr. Catherine N. Munro, Columbia
Dr. M. L. Nelson, North
Dr. G. H. Zerbst, Columbia
Dr. J. P. Young, Chester
Dr. H. L. Baker, Hemingway
Dr. D. E. Walker, Rock Hill
Dr. H. A. Gross, Barnwell
Dr. Thomas H. Smith, Bennettsville
Dr. Randolph C. Charles, Bennettsville
Dr. F. L. Carpenter, Latta
Dr. H. T. Hall, Aiken
Dr. H. A. Willis, Moncks Corner

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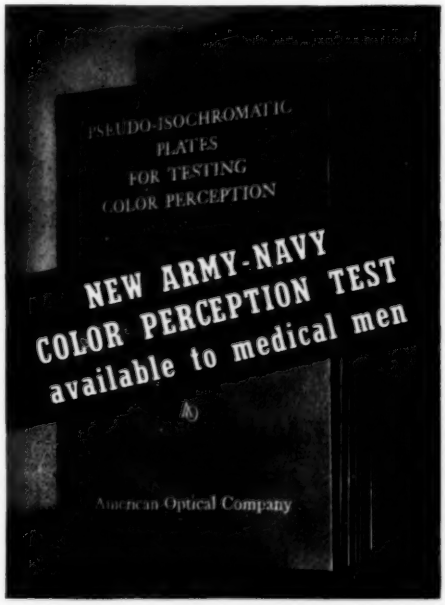

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